Centre d'excellence en approvisionnement
FRANCOachat

REQUEST FOR QUOTATION

26-25 - RFQ - New Elevator and Office Renovations - ÉÉ Antonine-Maillet – CSViamonde

ADDENDUM #1

Issue Date: March 4th, 2026

Submission Date: March 25, 2026 at 2:00:00 p.m. (local time)

The Competitive procurement process Coordinator is:
Kyle Patterson
Centre d'excellence en approvisionnement FRANCOachat
1, promenade Vanier, bureau 102
Welland, ON L3B 1A1
Telephone: (905) 732-9435 ext. #7
Email: info@FRANCOachat.ca

26-25 - RFQ - New Elevator and Office Renovations - ÉÉ Antonine-Maillet – CSViamonde

ADDENDUM #1

March 16, 2026

This addendum will form part of the terms, conditions and specifications outlined in the Request for Quotation - 26-25 - RFQ - New Elevator and Office Renovations - ÉÉ Antonine-Maillet - CSViamonde. All other components of the RFQ shall remain as provided.

Section #1 – Document Additions & Replacements

Addition:

Add: Architectural Addendum #1 - RFQ #26-25 - ÉÉ Antonine-Maillet.pdf

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Replacement:

Replace: Appendix E2 – Designated Substance and Hazardous Materials Specifications - RFQ #26-25 - Antonine-Maillet.pdf

With: Appendix E2 – Designated Substance and Hazardous Materials Specifications - RFQ #26-25 - Antonine-Maillet - Revised.pdf

Please see documents below this Addendum.

*****END OF ADDENDUM #1*****

ADDENDUM

82 Bellagio Cres, Vaughan, ON L4K 5K7
Fax: (905) 303 - 6636 Telephone: (905) 303 - 6606

PROJECT: École élémentaire Antonine-Maillet New Elevator and Office Renovations
615 Ridgeway Ave, Oshawa, Ontario L1J 2W3

PROJECT NO.: 25116

DATE: March 13, 2026

ADDENDUM NO.: 1

THE FOLLOWING ADDITIONS, DELETIONS, AND AMENDMENTS ARE HEREBY MADE PART OF THE DRAWINGS AND SPECIFICATIONS FOR THE ABOVE PROJECT:

ITEM 1: HARDWARE LIST
REFERENCE: Finishing Hardware Schedule revised March 12, 2026 (attached).

Description: In Specifications, after Section 08710, add Finishing Hardware Schedule, issued by Commercial Doors & Hardware Ltd. revised March 12, 2026 (attached).

ITEM 2: ELEVATOR SPECIFICATIONS SECTION 14 00 00 REVISION
REFERENCE: Division 14 Addendum 1 dated March 11, 2026 (attached).

Description: Refer to Division 14 Addendum 1, issued by KJA Elevator Consultants dated March 11, 2026 (attached).

ITEM 3: FIRE RATED GLASS REVISION
REFERENCE: Specifications Section 08800

Description: At Specifications Section 08800, revise Article 2.1.8 from:
".8 Fire rated glass: glass material labelled by accredited testing organization recognized by authorities having juridiction. Firelite Plus 8mm non-wired ceramic glazing or equal as approved by Consultant."
To:
".8 Fire rated glass: glass material labelled by accredited testing organization recognized by authorities having jurisdiction. Pyran Platinum L 9mm laminated glazing or equal as approved by Consultant."

ITEM 4: WATERPROOFING REPAIR AT EXISTING EXTERIOR WALL
REFERENCE: Drawing A3 revised March 13, 2026 (attached).
Drawing A7 revised March 13, 2026 (attached).

Site Photographs (attached).

Description: Refer to Drawing A3 Detail 1 and Drawing A7 Details 6 & 7 revised March 13, 2026 (attached).

See attached site photographs below for reference purposes only.

ITEM 5: ABBREVIATIONS

REFERENCE: Drawings and Specifications

Description: Abbreviations may be used in the Contract Documents and are to be governed by the following clauses.

.1 Abbreviations may or may not be punctuated by periods and may be in upper and/or lower case.

.2 Tense, singularity or plurality is to be read and applied in the context of the specific note.

.3 All notes are to be read in demonstrative syntax ie. instruction in the context of the complete notation.

.4 The Contractor is to advise the Consultant of undefined abbreviations and request clarification prior to the commencement of Work.

.5 Only the Architect has the authority to define abbreviations.

.6 The following table contains abbreviations which may be used in the Contract Documents including Drawings and Specifications.

&, +	AND
@	AT
+	PLUS
+/-	PLUS OR MINUS, APPROXIMATE SUBJECT TO VERIFICATION
ACT, AC. TILE	SUSPENDED ACOUSTIC TILE CEILING SYSTEM
AD, A.D.	AREA DRAIN
ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
ALUM	ALUMINUM
ARCH	ARCHITECTURAL
AVG	AVERAGE
B/F, BF	BARRIER FREE
BR	BRICK
C.T., CT	CERAMIC TILE
C/B	CHALKBOARD
C/C	CENTRE TO CENTRE
C/L	CENTER LINE
C/W	COMPLETE WITH
CAR	CARPET
CB	CATCH BASIN
CCM	CONVEX CEILING MIRROR
CCTV	CLOSED CIRCUIT TV
CH	COAT HOOKS
CLG	CEILING

CON	CONSULTANT
CONC	CONCRETE
CONC BL	CONCRETE BLOCK
CR	COAT RACK
CS	CONVENIENCE SHELF
DEMO	DEMOLITION, DEMOLISH
DET	DETAIL
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIM	DIMENSION
DIV	DIVISION
DO, DITTO	SAME, TYPICAL, REPEAT
DP. C	DAMPPROOF COURSE
DR	DOOR
ELEC	ELECTRICAL
ELEV	ELEVATION
EXIST, EX	EXISTING
EXT	EXTERIOR
FB	FIRE BLANKET
FD, F.D.	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FHC	FIRE HOSE CABINET
FH	FIRE HYDRANT
FIN	FINISH, FINISHED
FIN. FL.	FINISHED FLOOR
FIN. GR	FINISHED GRADE
FRR	FIRE RESISTANCE RATED
FSS	FOLDING SHOWER SEAT
GALV.	GALVANIZED
GB, GBR	GRAB BAR
GBF	FOLDING GRAB BAR
GBL	GRAB BAR L-SHAPE
GBS	SHOWER GRAB BAR
GC	GENERAL CONTRACTOR
GEN	GENERAL
GFA	GROSS FLOOR AREA
GFI	GROUND FAULT INTERRUPTOR
GL	GLAZING
GR	GRADE
GYP BD, G.B., GB	GYPSUM BOARD

HD	HAND DRYER
HD	HEAVY DUTY
HDF	HIGH DENSITY FIBRE BOARD
HOR	HORIZONTAL
HVAC	HEATING VENTILATION AND AIR CONDITIONING
INT	INTERIOR
LAP	LAY-IN ACOUSTIC PANEL
M	MIRROR
MAS	MASONRY
MAX, MAX.	MAXIMUM
MDF	MEDIUM DENSITY FIBRE BOARD
MECH	MECHANICAL
MET	METAL
MG, M.G.	MAKE GOOD
MH	MAN HOLE
MIN	MINIMUM
MIR	MIRROR
MISC.	MISCELLANEOUS
MOD. BIT	MODIFIED BITUMEN
N.I.C./NIC	NOT IN CONTRACT, NOT INCLUDED
N.T.S	NOT TO SCALE
N/A	NOT APPLICABLE
O.C., OC	ON CENTER
OBC	ONTARIO BUILDING CODE
OWSJ	OPEN WEB STEEL JOIST
P.T., PT	PORCELAIN TILE
PA	PUBLIC ADDRESS SYSTEM JACK OR CONTROL PANEL SEE ELECTRICAL
PCT	PRIVACY CURTAIN TRACK INCLUDING CURTAIN
PEO	PROFESSIONAL ENGINEERS OF ONTARIO
PLAM, P.LAM	PLASTIC LAMINATE
PLY	PLY WOOD
POLY	POLYETHYLENE
PREF	PREFFERED
PRE-FIN	PRE-FINISHED
PRE-MAN	PRE-MANUFACTURED
PS	PRESSED STEEL
PTD	PAPER TOWEL DISPENSER
PVC	POLYVINYL CHLORIDE
R+S	ROD AND SHELF
RD, R.D.	ROOF DRAIN
RF, RSF	RUBBER SHEET FLOORING

RE-BAR	REINFORCING BAR
REIN.	REINFORCED
RENO	RENOVATION
REQ'D	REQUIRED
RM	ROOM
RT	RUBBER TILE
RWL	RAINWATER LEADER - SEE MECHANICAL OR SITE SERVICING
S.S, SS	STAINLESS STEEL
SCB	SLIDING CHALK BOARD
SD	SOAP DISPENSER
SF	SHEET FLOORING
SEC, SECT	SECTION
SEP	SEPARATE
SIM	SIMILAR
SMT	SCIENCE MATH & TECHNOLOGY
SND	SANITARY NAPKIN DISPOSAL
SNDISP	SANITARY NAPKIN DISPENSER
SPEC	SPECIFICATION
SPEC. ED.	SPECIAL EDUCATION
SPMDD	STANDARD PROCTOR MAXIMUM DRY DENSITY
SR+C	SHOWER ROD + CURTAIN
SSD	SHOWER SOAP DISH
STO / STOR	STORAGE
STRUC	STRUCTURAL
SUP	SUPPORT, SUPPORTED
SW/B, SWB	SLIDING WHITE BOARD
T/B, TB	TACKBOARD
T/O	TOP OF
TD	TOILET TISSUE DISPENSER
TDD	PAPER TOWEL DISPENSER AND DISPOSAL
TLB	TOWEL BAR
TM T/M	TILTED MIRROR
TYP.	TYPICAL
U/N	UNLESS NOTED OTHERWISE
U/S	UNDERSIDE
VB, V.B.	VAPOUR BARRIER
VCT	VINYL COMPOSITE TILE
VSF	VINYL SHEET FLOORING
VERT, VER	VERTICAL
VEST	VESTIBULE
W/	WITH

W/B	WHITEBOARD
W/D	WASHER DRYER
WC	WATER CLOSET
WD	WOOD
WIN	WINDOW

Mingpeng (Priscilla) Liu
WK Lim and MP Liu Architects Inc.

END OF ADDENDUM NO. 1

c.c. Mr. Majid Bouattane - Conseil Scolaire Viamonde

FINISHING HARDWARE SCHEDULE

Ecole Elenentaire Antonine-Maillet Elev & office CSV

615 Ridgeway Ave, Oshawa

Architect
Wk Lim & MP Liu Architects Inc.

Detailer: **Riley Rykhoff**
Consultant: **Ryan Ruprecht**

Submittal Date: **Mar 9/26, MAR 12/26**

Manufacturers & Finishes

Manufacturers

Baron Metal
BESAM
BEST
Camden
Glynn-Johnson
HRWD SUPPLIER
Ives
LCN
Schlage
Von Duprin
Zero

Finishes

626 - Satin chromium plated over nickel
628 - Satin aluminum, clear anodized
630 - Satin stainless steel
689 - Aluminum painted
US26D - Satin chromium plated over nickel
US32D - Satin stainless steel

Openings Schedule

Opening Number(s)	Qty	Door Catalog	Location 1	To/ From	Location 2	Nominal Width	Nominal Height	Door Thickness	Hand	Label	Degree of Opening	Hardware Group	Remarks	Heading Num.
101	1		CORR	TO	CHG RM	950	2150	45	RH	45 min	90°	CLASS RM CL WS	LEVERSET, OVERHEAD STOP, KICKPLATE.	1
101C	1		CHG RM	FROM	MACH RM	950	2150	45	LHR	2 Hr	100°	STORAGE CL OHS	LEVERSET, DOOR CLOSER, KICKPLATE.	2
202	1		CORR	TO	GEN OFFICE	950	2150	45	LH	45 min	90°	CLASS RM CL OHS	LEVERSET, OVERHEAD STOP, KICKPLATE.	3
202A	1	<Wood>	GEN OFFICE	TO	COPY RM	950	2150	45	LH		100°	CLASS RM OH	LEVERSET, OVERHEAD STOP, KICKPLATE.	4
202B	1	<Wood>	GEN OFFICE	TO	VP	950	2150	45	RH		90°	CLASS RM OH	LEVERSET, OVERHEAD STOP, KICKPLATE.	4
202C	1	<Wood>	GEN OFFICE	TO	PRINCIPAL	950	2150	45	LH		90°	CLASS RM OH	LEVERSET, OVERHEAD STOP, KICKPLATE.	4
202D	1	<Wood>	GEN OFFICE	TO	HEALTH RM	950	2150	45	LH		90°	CLASS RM OH	LEVERSET, OVERHEAD STOP, KICKPLATE.	4
202E	1	<Wood>	HEALTH RM	TO	WR	950	2150	45	RH		90°	WR	LEVERSET, OVERHEAD STOP, KICKPLATE.	5
C102	1		CORR	FROM	RM C102	1000	2150	45	RHR	45 min	90°	VEST SGL EXIT ADO	LEVERSET + PANIC DEVICE, OVERHEAD STOP, MOTORIZED OPERATOR, ELEC. STRIKE, KICKPLATE	6
202W	1			TO		525, 525	1300			1 Hr		WINDOW	PRESSED STEEL WINDOW FRAME AND GLASS ASSEMBLY.	7

GENERAL:

-HARDWRE SUPPLIER SECTION O8710 TO SUPPLY AND INSTALL ADO. NO ALTERNATE WILL BE ACCEPTED.

Hardware Schedule

Heading #1

Item #1 — 1 Single door 101, CORR TO CHG RM — 90° RH

950 x 2150 x 45 - HM DR x HM FR - 45 min

3	Standard Hinge	BEST FBB168 (4 1/2" x 4 1/2") US26D	US26D
1	Lockset	Schlage ND70TD SPA x 626	626
1	Cylinder	Schlage 20-030-EV S123 GMK 626	626
1	Surface Closer	LCN 4040XP EDA ST-3068 689 RH	689
1	Kick Plate	Ives 8400 US32D 200mm x 950mm LESS 40MM B-CS	US32D
1	Wall Door Stop	Ives WS406/407CVX US32D	US32D

Heading #2

Item #2 — 1 Single door 101C, CHG RM FROM MACH RM — 100° LHR

950 x 2150 x 45 - HM DR x HM FR - 2 Hr

3	Standard Hinge	BEST FBB168 (4 1/2" x 4 1/2") US26D	US26D
1	Lockset	Schlage ND80TD SPA x 626	626
1	Cylinder	Schlage 20-030-EV S123 GMK 626	626
1	Surface Closer	LCN 4040XP SCUSH ST-3068 689	689
1	Kick Plate	Ives 8400 US32D 200mm x 950mm LESS 40MM B-CS	US32D
1	Gasketing	Zero 188S-BK (1 x 950 / 2 x 2150)	-BK
1	Gasketing	Zero 355AA x 950	AA

Heading #3

Item #3 — 1 Single door 202, CORR TO GEN OFFICE — 90° LH

950 x 2150 x 45 - HM DR x HM FR - 45 min

3	Standard Hinge	BEST FBB168 (4 1/2" x 4 1/2") US26D	US26D
1	Lockset	Schlage ND70TD SPA x 626	626
1	Cylinder	Schlage 20-030-EV S123 GMK 626	626
1	Surface Closer	LCN 4040XP REG 689	689
1	Kick Plate	Ives 8400 US32D 200mm x 950mm LESS 40MM B-CS	US32D
1	Overhead Door Stop	Glynn-Johnson 904S US32D	US32D

Heading #4

Item #4 — 1 Single door 202A, GEN OFFICE TO COPY RM — 100° LH

Item #5 — 1 Single door 202B, GEN OFFICE TO VP — 90° RH

Item #6 — 1 Single door 202C, GEN OFFICE TO PRINCIPAL — 90° LH

Item #7 — 1 Single door 202D, GEN OFFICE TO HEALTH RM — 90° LH

950 x 2150 x 45 - WD DR x HM FR

12	Standard Hinge	BEST FBB179 (4 1/2" x 4) US26D	US26D
4	Lockset	Schlage ND70TD SPA x 626	626
4	Cylinder	Schlage 20-030-EV S123 GMK 626	626
4	Kick Plate	Ives 8400 US32D 200mm x 950mm LESS 40MM B-CS	US32D
4	Overhead Door Stop	Glynn-Johnson 904S US32D	US32D

Heading #5

Item #8 1 Single door 202E, HEALTH RM TO WR 90° RH

950 x 2150 x 45 - WD DR x HM FR

3	Standard Hinge	BEST FBB179 (4 1/2" x 4) US26D	US26D
1	Lockset	Schlage ND40S RHO 626 OS-OCC	626
1	Kick Plate	Ives 8400 US32D 305mm x 950mm LESS 40MM B-CS	US32D
1	Overhead Door Stop	Glynn-Johnson 904S US32D	US32D

Heading #6

Item #9 — 1 Single door C102, CORR FROM RM C102 — 90° RHR

1000 x 2150 x 45 - HM DR x HM FR - 45 min

4	Standard Hinge	BEST FBB168 (4 1/2" x 4 1/2") US26D	US26D
1	Exit Device	Von Duprin 98-L-F-626 x 996L-06 x 4' Bar - RHR	626/626
1	Cylinder	Schlage 20-030-EV S123 GMK 626	626
1	Cylinder	Schlage 26-094 FSIC OPEN 626	626
1	Electric Strike	Von Duprin 6300 12/24VDC US32D	US32D
1	Electronic Closer	BESAM SW-100 X FWD 628 NO ALTERNATE	628
1	Kick Plate	Ives 8400 US32D 200mm x 1000mm LESS 40MM B-CS	US32D
1	Overhead Door Stop	Glynn-Johnson 105S US32D ADJ	US32D
1	Gasketing	Zero 188S-BK (1 x 1000 / 2 x 2150)	-BK
1	Miscellaneous Item	Von Duprin CON-6W	
1	KEY SWITCH	LCN 8310-806K	
2	ACTUATOR	LCN 8310-852T	630
2	ESCUTCHEON	LCN 8310-876	630
1	Miscellaneous Hardware	Camden CX-33	
1	Miscellaneous Hardware	HRWD SUPPLIER RISER WIRING DIAGRAM BY HARDWARE SUPPLIER	

HARDWARE SUPPLIER DIV 08710 TO SUPPLY AND INSTALL ADO.

ELECTRICAL CONTRACTOR TO SUPPLY & INSTALL 120VAC / ALL LVW IN CONDUIT PER WIRING DIAGRAM SUPPLIED BY HARDWARE SUPPLIER.

Heading #7

Item #10 — 1 Pair of doors 202W, TO

525, 525 x 1300 x __ - HM DR x HM FR - 1 Hr

HM WINDOW COMPLETE BY WIDOW SUPPLIER

5 Knuckle Full Mortise Hinges

Heavy Weight Ball Bearing

FBB168 – (ANSI A8111) Steel – polished and plated or phosphated and prime coated for painting

FBB199 – (ANSI A2111) Brass or bronze – polished and plated or painted

FBB199 (32) – (ANSI A5111) Stainless steel – highly polished

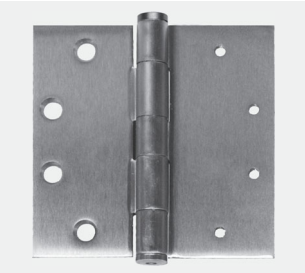
FBB199 (32D) – (ANSI A5111) Stainless steel – satin finish

- For use on heavy doors or doors where high frequency is expected such as entrance doors to office buildings, stores, public buildings and corridor entrance doors to offices
- All hinges have template screw hole location for use on either wood or hollow metal doors and frames
- Equipped with four Stanley permanently lubricated non-detachable ball bearings
- Pins in non-ferrous hinges are stainless steel
- Hole in bottom tip for easy pin removal
- Reversible flush tips and pins
- Hinges can be furnished as follows:
  - with raised barrel (RB)
  - with electric wires and/or switches (CE and/or CS)
  - with hospital tips (HT)
  - with decorative tips
  - with security studs
  - with non-removable pins (NRP)

Size Open		Gauge of Metal		Flat Head Screws Per Piece		Quantity Per		Case Weight		Case Weight	
						Box	Case	Bronze		Steel	
Inches	(mm)	Inches	(mm)	Machine	Wood	Each	Each	Lbs.	(Kg)	Lbs.	(Kg)
4-1/2 x 4-1/2	[114 x 114]	.180	[4.6]	8 - 12-24 x 1/2	8 - 12 x 1-1/4	3	30	45	[21]	42	[19]
5 x 4-1/2	[127 x 114]	.190	[4.8]	8 - 12-24 x 1/2	8 - 12 x 1-1/2	3	24	46	[21]	40	[18]
5 x 5	[127 x 127]	.190	[4.8]	8 - 12-24 x 1/2	8 - 12 x 1-1/2	3	24	50	[23]	46	[21]
6 x 4-1/2	[152 x 114]	.203	[5.2]	10 - 1/4 -20 x 1/2	10 - 14 x 1-1/2	3	24	63	[29]	53	[24]
6 x 5	[152 x 127]	.203	[5.2]	10 - 1/4 -20 x 1/2	10 - 14 x 1-1 /2	3	24	65	[30]	55	[25]
6 x 6	[152 x 152]	.203	[5.2]	10 - 1/4 -20 x 1/2	10 - 14 x 1-1/2	3	24	76	[35]	64	[29]
8 x 6*	[203 x 152]	.203	[5.2]	16 - 1/4 -20 x 1/2	16 - 14 x 1-1/2	3	12	57	[26]	51	[23]
8 x 8*	[203 x 203]	.203	[5.2]	16 - 1/4 -20 x 1/2	16 - 14 x 1-1/2	3	12	68	[31]	61	[28]

* Available in Steel only
Consult factory for other sizes not listed

5 Knuckle Slip-In Hinges



Standard Weight Ball Bearing – Application "A"

FBB179 – (ANSI A8152) Slip-in application "A", steel – polished and plated or painted

FBB191 – (ANSI A2152) Slip-in application "A", brass or bronze – polished and plated or painted

FBB191 (32) – (ANSI A5152) Slip-in application "A", stainless steel – highly polished

FBB191 (32D) – (ANSI A5152) Slip-in application "A", stainless steel – satin finish

- For aluminum doors with aluminum frames
- "Slip-in" application where one leaf of hinge is inserted through a slot in door or frame, and the other leaf mortised
- Application A – specify "swaged to provide 3/16" (4.8mm) clearance between leaves when parallel and one leaf with standard punching and countersinking and other leaf drilled and tapped." Specify hand desired.
- Round corners – use prefix "RD" and specify radius desired. 1/4" (6.4mm) radius available on all sizes
- Other types and sizes available on request
- Pins in nonferrous hinges are stainless steel

Size Open		Gauge of Metal		Flat Head Screws Per Piece	Quantity Per		Case Weight		Case Weight	
					Box	Case	Bronze		Steel	
Inches	(mm)	Inches	(mm)	Machine	Each	Each	Lbs.	(Kg)	Lbs.	(Kg)
4 x 4	(102 x 102)	.130	(3.3)	8 - 12-24 x 1/2	3	48	44	(20)	45	(21)
4-1/2 x 4	(114 x 102)	.134	(3.4)	8 - 12-24 x 1/2	3	48	52	(24)	55	(25)
4-1/2 x 4-1/2	(114 x 114)	.134	(3.4)	8 - 12-24 x 1/2	3	48	55	(25)	59	(27)

* For application A when used on wood doors, specify wood screws for door leaf

Standard Weight Ball Bearing – Application "B"

FBB179 – (ANSI A8142) Slip-in application "B", Steel – polished and plated or painted

FBB191 – (ANSI A2142) Slip-in application "B", Brass or bronze – polished and plated or painted

FBB191 (32) – (ANSI A5142) Slip-in application "B", Stainless steel – highly polished

FBB191 (32D) – (ANSI A5142) Slip-in application "B", Stainless steel – satin finish

- For aluminum doors with aluminum frames
- "Slip-in" application where both leaves of hinge are inserted through slots in door and frame
- Application B – specify "both leaves swaged to provide 5/16" (7.9mm) clearance between leaves when parallel and both leaves drilled and tapped"
- Round corners – use prefix "RD" and specify radius desired. 1/4" (6.4mm) radius available on all sizes
- Other types and sizes available on request
- Pins in nonferrous hinges are stainless steel
- Not handed

Size Open		Gauge of Metal		Flat Head Screws Per Piece	Quantity Per		Case Weight		Case Weight	
					Box	Case	Bronze		Steel	
Inches	(mm)	Inches	(mm)	Machine	Each	Each	Lbs.	(Kg)	Lbs.	(Kg)
4 x 4	(102 x 102)	.130	(3.3)	8 - 12-24 x 1/2	3	48	44	(20)	45	(21)
4-1/2 x 4	(114 x 102)	.134	(3.4)	8 - 12-24 x 1/2	3	48	52	(24)	55	(25)
4-1/2 x 4-1/2	(114 x 114)	.134	(3.4)	8 - 12-24 x 1/2	3	48	55	(25)	59	(27)

* For application A when used on wood doors, specify wood screws for door leaf

CX-33: ADVANCED LOGIC RELAY

CX-33 is a 'state of the art' door controller designed for 'universal' operation in automatic door and application security. This compact unit is small enough to fit inside most door operator cases. It provides a large 3 segment LED and simple push buttons for the easiest programming, and supports illuminated signage in restroom applications. It also leads the market with a range of exclusive operating features, including time duration in airlock applications and protection of automatic door operators when utilizing magnetic locks.

Features

- 15 operating modes with sub-modes
- Easily sequence multiple inputs with multiple maintain and hold outputs
- New V3.2 Features Include:
  - Lock down mode
  - Delayed relay activation
  - Selectable N.O or N.C. inputs
- Large 3 segment (blue) LED display
- Outstanding power filtering and surge protection
- Selectable time delays with delay on input activation
- Larger terminal strips
- 12V to 24V AC/DC
- 3 year warranty

MODEL	
CX-33	Advanced Logic Relay

Specifications

Voltage:	12V to 24V AC/DC
Current Draw:	105mA Typical, 320mA Max
Response Time:	0.5 Seconds
Display:	Blue Multi-Segment LED
Input:	4 x Dry 1 x Wet: min. 5V AC/DC N/O or N/C Selectable
Output:	3 x Form C (SPDT)
Contact Rating:	3A @ 30 VDC
Temp Range:	-22°F to +185°F (-30°C to +85°C)
Time Delay:	Hold 1 timer: 0-50 Seconds Delay 1 Timer: 0-15 Seconds Hold 2 timer: 0-50 Seconds Delay 2 timer: 0-60 Seconds Hold 3 Timer: 0-50 Seconds Delay on Activate: 0-10 Seconds
Dimensions:	2"H x 6"W x 7/8"D (51mm x 152mm x 22mm)

CX-33PS: ADVANCED LOGIC RELAY, POWER SUPPLY AND CABINET

*The industry leading **CX-33** Advanced Logic Relay is available in a metal cabinet that centralizes all door and security control system components; a 12/24 VDC power supply module, and color coded termination blocks for quick and easy installation.*

Features

- Rugged and compact metal cabinet
- Pre-wired with large terminal block for easy access
- Removable door with option for cabinet lock
- Five convenient conduit knockouts; one per side
- 12/24V DC power supply, 2 Amp. (UL listed)
- Available as part of Camden Restroom Control Kits (See pages 36-37)
- Short circuit and thermal overload protection
- 3 year warranty

MODEL	
CX-33PS	Advanced Logic Relay, 2 Amp Power Supply, Cabinet and Transformer
Option	
'L'	Add suffix '**L**' to model number for Cabinet Lock

Specifications

Voltage:	12V to 28V AC/DC
Output:	12V or 24 VDC
Current:	2 Amps
Temp Range:	32°F to +120°F (0°C to +49°C)
Dimensions:	11-1/16" H x 7-7/8"W x 2-13/16"D 281mm x 200mm x 72mm)

RELAY CONTROL SELECTION CHART

DESCRIPTION	 CX-33	 CX-EMF-2	 CX-12PLUS	 CX-SA1	NOTES
MODES					
No. of Applications / Modes	15	7	8	2	
Make/Break relay (switching network)	Yes	No	Yes	Yes	Most common application
Apartment/Condo Interfone connection	Yes	No	Yes	No	Eliminates need for separate isolating relay
Bi-directional door sequencer	Yes	Yes	Yes	No	Control of 2 doors
Restroom applications (#) (dedicated output for signage)	2* (Yes)	3* (Yes)	2* (Yes)	No	*Includes both normally unlocked and locked washroom applications
Latching relay modes	Yes	Yes	Yes	Yes	A.K.A - Impulse, sequence, or alternate action
ATM Vestibule control	No	Yes	No	No	Exterior door control on banks, etc.
Dedicated Airlock modes (# of doors)	Yes (2)	Yes (5)	No	No	Prevents more than 1 door open at a time
2 Door Mantrap	No	Yes	No	No	True security mantrap
New! Lock-Down Mode	Yes	No	No	No	Applications include schools
New! Delayed Egress mode	Yes	No	No	No	For warehouse rear emergency exits
SPECIFICATIONS					
No. of Adjustable Time Delays (Type)	6 (digital)	5 (analog)	3 (analog)	3 (analog)	Digital ensures greater accuracy. Larger number of timers.
Adjustable delay-on-activate feature	Yes	No	No	No	Also called a "nuisance delay"
Quantity and Type of Inputs	5 (1 Wet, & 4 Dry)	8 (7 Dry, & 1 Digital)	4 (2 Wet, & 2 Dry)	3 (1 Wet, & 2 Dry)	Larger number of inputs
User Selectable N/O or N/C Inputs	Yes	No	No	No	Camden exclusive feature
Simultaneous selectable momentary, maintained and latching inputs	Yes	Yes	No	Yes	Allows for most flexibility
Number of outputs and Relay rating	3 Form 'C' @ 3 Amps each	5 Form 'C' @ 3 Amps each	2 Form 'C' @ 3 Amps each	2 Form 'C' @ 2 Amps each	Capable of switching larger loads such as magnetic locks
12 – 24 V AC/DC Input Power	Yes	Yes	Yes	Yes	Very stable, forgiving and reliable
Case / Protection	Clear Plastic	Clear Plastic	Paper Wrap	Paper Wrap	
Dimensions	6" x 2" x 7/8"	6-7/8" x 2-7/8" x 7/8"	3-1/4" x 2-1/4" x 5/8"	4-1/8" x 3-1/2" x 5/8"	

90 Series surface overhead door holders/stops

90 Series heavy-duty

Glynn-Johnson 90 Series holders and stops are the most rugged models available for heavy-duty applications. The channel is thru-bolted to the door with sex bolts, and the jamb bracket is surface mounted to the jamb, requiring minimal door and frame preparation.

These versatile units can be used in conjunction with most surface-applied door closers. The provided templates allow for variable mounting positions, ranging from 85° to 110° hold-open/stop angle. These templates are designed for installation in almost all types of doors, including doors with conventional butt-type hinges or specialty hinges.

Four models:

- 90H Series hold-open model
- 90S Series stop-only model
- 90F Series friction hold-open model
- 90SE Series special stop-only model

Five sizes:

- Simple
- Standardized
- Each model is available in five sizes

Three options:

- J—Angle jamb bracket
- SHIM—Blade stop shim kits
- SOC—Pin-in-socket security screw package

Unmatched convenience:

- Non-handed
- Improved compatibility with door closers
- Single-acting doors
- Interior/exterior applications
- Durable
- Easy to install
- Improved corrosion resistance
- Function conversion kits available

Materials and finishes

In 300 Series stainless steel, brass and steel substrates, these models are available in the largest selection of finishes in the industry. Stainless steel models offer the highest resistance to corrosion. Available in the following finishes:

BHMA	US	Finish description
605	US3	Polished Brass
606	US4	Satin Brass
612	US10	Satin Bronze
613	US10B	Oil Rubbed Bronze
619	US15	Satin Nickel
625	US26	Polished Chrome
643E/716	–	Aged Bronze, Blackened, Edge Relieved
652	–	Satin Chrome
706	SP4	Powder Coat Brass
691	SP10	Powder Coat Bronze
689	SP28	Powder Coat Aluminum
695	SP313	Powder Coat Dark Bronze
622	SPBLK	Powder Coat Black

Models

Glynn-Johnson 90 Series door holders and stops provide long-lasting protection for doors, frames and hardware. All models incorporate a heavy-duty channel/slide-arm design and offset jamb bracket. This unique design allows for simple field modification of functions, should user requirements change.

90H Series hold-open

(Suffix H) Hold-open models provide a convenient method of holding the door open at a predetermined position for short or long periods of time, permitting an unobstructed traffic flow through the opening. The hold-open function can easily be turned on or off by simply rotating the serrated knob on the bottom of the channel. This knob engages the hold-open mechanism, allowing the door to be held open at a predetermined position ranging from 85° to 110°. When the knob is flipped over, it acts as a stop and shock absorber.

The tension on the hold-open mechanism can be adjusted using a phillips screwdriver to offset air currents or other exterior conditions. The hold-open tension adjustment is located on the top of the slider in the channel.

100 Series concealed overhead door holders/stops

100 Series heavy-duty

Glynn-Johnson offers a complete line of overhead door holders and stops, accommodating virtually all openings with solutions for even the most complex door control problems. These concealed holders and stops provide the most attractive and reliable heavy-duty door control available.

Glynn-Johnson 100 Series holders and stops provide the most reliable and versatile concealed overhead door control. They are designed for installation on virtually all types of doors mounted on conventional type butt hinges, pivots, continuous hinges, swing clear hinges and numerous other specialty hinges. When used in conjunction with many surface-applied door closers, 100 Series holders and stops provide the most effective control for entrance doors and vestibule doors of all types, as well as heavy or often used interior doors. Templates provided allow for variable mounting positions, ranging from 85° - 110° of opening.

Five models:

- 100H Series hold-open model
- 100HP Series internal hold-open model
- 100F Series friction hold-open model
- 100S Series stop-only model
- 100SE Series special stop-only model

Six sizes:

- Each model comes in six sizes.
- Simple
- Standardized

Three options:

- ADJ—Adjustable jamb bracket
- CJ—Jamb Bracket for use with LCN 5030 closer
- SOC—Pin-in-socket security screw package

Unmatched convenience:

- Non-handed
- Improved compatibility with door closers
- Single/double-acting doors
- Interior/exterior applications
- Reduced door prep
- Durable
- Improved corrosion resistance
- Function conversion kits are available

Materials and finishes

In heavy gauge brass or 300 Series stainless steel, these models offer the broadest range of finishes in the industry, complementing any design and offering the highest resistance to corrosion. Available in the following finishes:

BHMA	US	Finish description
605	US3	Polished Brass
606	US4	Satin Brass
612	US10	Satin Bronze
613	US10B	Oil Rubbed Bronze
619	US15	Satin Nickel
625	US26	Polished Chrome
626	US26D	Satin Chrome
629	US32	Bright Stainless Steel
630	US32D	Stainless Steel
643E/716	–	Aged Bronze, Blackened, Edge Relieved
706	SP4	Powder Coat Brass
691	SP10	Powder Coat Bronze
689	SP28	Powder Coat Aluminum
695	SP313	Powder Coat Dark Bronze
622	SPBLK	Powder Coat Black

Models

These models provide a wide range of optional features, and are ideal for use on entrance and vestibule doors, large doors, doors opened frequently, or doors subject to abuse. These models are also furnished with an offset-style jamb bracket.

Designed for heavy-duty applications, 100 Series models will provide long-lasting protection to doors, frames, hinges, related hardware and surrounding walls or obstructions.

100H Series hold-open

(Suffix H) The hold-open function should be used where it is desired to hold a door open at a predetermined position for short or long periods of time, permitting an unobstructed traffic flow through the opening.

These models are both selective and adjustable, featuring the most reliable hold-open mechanism available. They feature a control knob which protrudes from the face of the door and turns the hold-open function on or off. Set in the inactive position, the unit acts as a stop and shock absorber. The tension on the hold-open mechanism can be adjusted using an Allen wrench to offset air currents or other exterior conditions. The hold-open tension adjustment is located in the bottom of the track in the top of the door.

100HP Series internal hold-open

These models provide a hold-open unit with the hold-open mechanism built into the channel, thus reducing the door prep. The 100HP have a preset hold-open force that is not adjustable. The hold-open feature is not selectable in these units, so the doors are always held open.

100F Series friction hold-open

(Suffix F) Friction hold-open models provide an alternative holding method, ideal for heavy patient room doors, closet doors or similar applications where multiple hold-open positions are desired. The friction tension is adjusted using an Allen wrench and an open end wrench. The friction tension adjustment is located on the top of the slider in the channel.

100S Series stop-only

(Suffix S) When the hold-open function is not required, the stop-only function provides the same effective door control minus the hold-open feature. The stop-only model may be used on fire doors.

100SE Series special stop-only

(Suffix SE) When stop-only models are used in conjunction with single point hold-open electronic door closers, they may be ordered without the shock-absorbing mechanism. Used as an auxiliary stop with these closers, they will prolong the life of the closer. The stop location is adjusted using an Allen wrench on the stop block located in the channel. The SE option cannot be added to an existing unit. It must be factory ordered.

Note: Caution should be taken when using this option in other applications, as the elimination of the shock-absorbing spring can put added stress on the door and frame.

Application Information

UL Classification

The 100 Series stop-only models are classified by Underwriters Laboratories (UL) as miscellaneous fire door accessories. This classification applies to use on either hollow metal fire doors or wood fire doors. Where wood door manufacturer's listing allows for the cutout required for installation, concealed overhead stops may be used on those wood fire doors. These units may be used on doors of any rating. As a reminder, the miscellaneous fire door accessories (GVUX) section is defined by UL as: "Miscellaneous fire door accessories are intended in the individual listings. The accessories have been investigated to determine that when installed in accordance with the manufacturer's instructions, the accessories do not adversely affect the fire rating of the fire door and/or fire door frames."

Dead-stop templating

If a wall or similar obstruction is in place at 110° or less opening angle (i.e. doors that open back-to-back), dead-stop templating should be used. This includes all hold-open, friction and stop-only models, except when the "SE" option is used. The dead-stop position is reached when the shock-absorbing spring is fully compressed, the initial degree of opening will be 5° to 7° less than the dead-stop opening.

Example: If the holder is templated to a 100° dead-stop, the door will hold open at an angle between 93° and 95° but no further than 100°.

Note: Do not use dead-stop templating on the 100SE Series since there is no shock-absorbing spring.

Environmental considerations

Environmental factors should always be considered when specifying overhead holders and stops. Doors that are positioned on a building's exterior or subject to corrosive conditions should be equipped with a holder constructed primarily of stainless steel or brass materials. For interior applications, steel is acceptable, though brass substrates generally provide a more attractive architectural-grade finish.

Options

Suffix ADJ (adjustable jamb bracket)

An additional option on the 100 Series is the adjustable jamb bracket, which allows the degree of hold-open or stop angle to be adjusted after installation. Suffix "ADJ" is available in all functions, but only in sizes 3, 4, 5 and 6. ADJ jamb bracket requires additional frame prep. The ADJ option cannot be added to an existing unit, it must be factory ordered.

Suffix CJ (closer jamb bracket)

Provides a special jamb bracket needed for 100 Series units used with LCN 5030 closers. These special jamb brackets are handed, so handing will need to be specified when ordering the "CJ" option, CJLH for a left hand door and CJRH for a right hand door. The CJ option cannot be added to an existing unit, it must be factory ordered.

Suffix SOC (Pin-in-socket security screw package)

A screw package with pin-in-socket screws for mounting the jamb bracket to the frame is provided instead of the standard screw package.

8400/8402

Commercial protection plates (UL and non-UL models)

- All plates, metal and plastic, come standard with four beveled edges and countersunk mounting holes (B-CS)
- Protection plates must be ordered in 1/2" increments. Available in other sizes, consult customer service
- For 8402 UL Plates, UL mark appears in upper left corner. Not available on plastic protection plates (special cutouts are not allowed on UL kick plates)

Specifications

Material substrate	▪ Available in .050" thick brass, stainless steel or aluminum; and 1/8" thick high impact polyethylene in clear or black ▪ Aluminum 5005 Series, brass C26800 Series, stainless steel 300 Series, plastic
Mounting hardware	▪ Standard mounting package, 16 per pack – #6 x 5/8 Oval head screws ▪ Optional Tek/Torx package, specify TK-TX – #6 x 5/8 Self-drilling, self-tapping screws – #6 x 5/8 Torx screws
Certifications	▪ Meets ANSI/BHMA A156.6 for J301 ▪ UL protection plates certified to UL10C

Number of screw packs required by plate size (specify Tek screws or Torx screws)

	22"-25"	26"-33"	34"-41"	42"-48"
4"-8"	1	1	1	1
9"-16"	1	1	1	1
17"-24"	1	1	1	2
25"-32"	1	1	2	2
33"-40"	1	2	2	2
41"-48"	2	2	2	2

Options

- Specify B-NH for no mounting holes (Not available on 8402. Available only with US32D, US32, US3, US4, US28, CLR, P-BLK only)
- Specify B-NHA for no mounting holes with adhesive (Not available on 8402.)
- Specify ERS prepped with extra row of screws
- Special Cut-outs are available as engineering special, consult customer service

Finishes

BHMA	Description	Substrate	Finish	Max sizes
605	Bright Brass	Brass	US3	24" x 48"
606	Satin Brass	Brass	US4	24" x 48"
612	Satin Bronze	Brass	US10	24" x 48"
613	Oil Rubbed Bronze	Brass	US10B	36" X 46"
619	Satin Nickel	Stainless	US15	24" x 48"
625	Bright Chrome	Stainless	US26	48" X 48"
626	Satin Chrome	Brass	US26D	30" x 36"
628	Satin Aluminum	Aluminum	US28	48" x 48"
629	Bright Stainless Steel	Stainless steel	US32	48" x 48"
630	Satin Stainless Steel	Stainless steel	US32D	48" x 48"
654	Satin Stainless Steel	Stainless steel	US32D	48" x 48"
695	Dark Bronze Powder Coat	Stainless steel	SP313/US10BE	24" x 48"
BLK	Matte Black	Stainless steel	BLK	24" x 48"
P-BLK	Black	Plastic	P-BLK	48" x 48"
CLR	Clear	Plastic	CLR	48" x 48"

Custom finishes are available as engineering special, consult customer service

Available accessories

- Gasket tape kit tape is recommended when using a brass plate on a metal door to reduce tarnishing from electrolytic oxidation
- One tape pack will cover an the perimeters of a 8" x 34" kickplate (Order 8401 gasket tape)

WS406/WS407CVX, WS406/WS407CCV

WS406/WS407CVX

Wall stops (convex and concave models)

- Constructed in sturdy yet economical wrought base of brass or stainless steel construction
- Feature concealed tamper-proof mounting
- Shipped factory preassembled backplate to reduce installation cost
- Easy installation by inserting screwdriver through small hole in rubber
- WS406/407CVX – convex rubber bumper, packed with fasteners for drywall/wood applications
- WS406/407CCV – concave rubber bumper which avoids damage to locks with projecting buttons, packed with fasteners for drywall/wood applications

Specifications

Material substrate	Made from brass and stainless steel
Certifications	▪ WS406/407CVX Meets ANSI/BHMA 156.16, L22201 for brass and L52201 for stainless steel ▪ WS406/407CCV Meets ANSI/BHMA 156.16, L22251 for brass and L52251 for stainless steel

Dimensions

Base diameter	Base thickness	Overall projection
2 1/2"	3/8"	1"

Finishes

BHMA	Description	Substrate	Finish
605	Bright Brass	Brass	US3
606	Satin Brass	Brass	US4
609	Blackened Brass	Brass	US5
612	Satin Bronze	Brass	US10
613	Oil Rubbed Bronze	Brass	US10B
619	Satin Nickel	Brass	US15
622	Matte Black	Brass	BLK
625	Bright Chrome	Brass	US26
626	Satin Chrome	Brass	US26D
–	Aged Bronze	Brass	643e/716
630	Stainless Steel	Stainless steel	US32D

For other colors, consult factory.
Note: WS406/407 is the full part number. 406 and 407 are not different products.

411R-W

Wall bumper - adhesive

- Adhesive-backed wall door stop for use on clean, smooth, flat surfaces only
- Non-marring white rubber
- Concave design permits knob to strike stop without damaging or engaging lock mechanism

Specifications

Material substrate	Made from rubber

Dimensions

Base diameter	Base thickness	Overall projection
1 7/8"	3/8"	1 1/16"

Finish

BHMA	Description	Substrate	Finish
–	White	Rubber	R-W

6" Surface and flush mounts

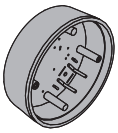
8310-852
Hard Wired Wall Mount Actuator, Logo, 6 inch round
- Hardwired low voltage actuator with round, stainless steel touch plate in 6" (152mm) diameter
- Engraved blue filled handicap symbol conforms to most accessibility codes
- Designed to mount in a flush or surface mount box (sold separately) in/on a vertical surface near the controlled door
- Optional mounting in single gang electrical box (by others) or double gang box (4" x 4" by others)
- Heavy industrial grade components provide vandal resistant mounting and weather resistant switch standard.

8310-852WP
Wireless Wall Mount Actuator Package, Logo, 6 inch round
- Wireless, low profile, low voltage actuator with round, stainless steel touch plate in 6" (152mm) diameter
- Engraved blue filled handicap symbol conforms to most accessibility codes
- Surface mount box includes integral transmitter w/battery and actuator switch
- Heavy industrial grade components provide vandal resistant mounting and weather resistant switch standard
- Requires 8310-865 Receiver

8310-852T
Hard Wired Wall Mount Actuator, Logo and Text, 6 inch round
- Same as the 8310-852, with the added engraving of "Push to Open"

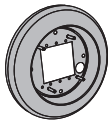
8310-852TWP
Wireless Wall Mount Actuator Package, Logo and Text, 6 inch round
- Same as the 8310-852WP, with the added engraving of "Push to Open"

8310-869F
Flush Mount Box
- Rugged Plastic Box, 6" Round
- Optional accessory - can be used w/any 6" round actuator

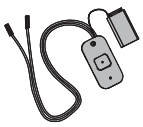


8310-869S
Surface Mount Box
- Rugged Plastic Box, 6" Round
- Optional accessory - can be used w/any 6" round actuator

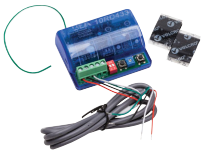
8310-802
Weather/Trim Ring
- Plastic Weather/Trim Ring, 6" Round
- Optional accessory - can be used w/ any 6" round plastic mounting box



8310-876
Escutcheon
- Tapered stainless steel escutcheon covers the gap between the wall and the back of the wall plate actuators when mounted in electrical boxes (by others) to minimize cart damage or vandalism
- Optional accessory - Can be used w/any 6" round actuator
- Not to be used with wireless function



8310-844
Transmitter, Wireless, 1 Channel, Wall Mount, 9V
- Transmitter, Wireless, 1 Channel, 9V battery included
- Use to convert standard wall mount actuator to wireless
- Requires 8310-865 Receiver



8310-865
Wireless Receiver
- Receiver, Wireless, 1 Channel, w/ Sequencing Feature
- Used in conjunction w/ Wireless Actuators and Transmitter(s) for push plate applications

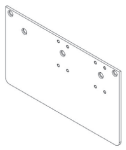
Accessories

8310-806K
Key Switch
- Type, 3 Position (On/Off/Hold Open)
- Optional switch used w/Senior Swing, Benchmark, or 4630/4640 operators with (CS) option

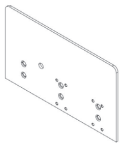
8310-806R
Rocker Switch
- Type, 3 Position (On/Off/Hold Open)
- Optional switch used w/Senior Swing, Benchmark, or 4630/4640 operators with (CS) option

8310-807
Line Filter
- AC, 120v, Optional filter used w/Senior Operators to reduce 'line noise'

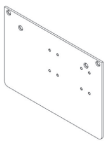
8310-845
Programmable Relay Module
- Used to sequence door operation in Senior Swing and Benchmark for hard wired applications



6440-18
COMPACT Drop Plate – Door Mount Pull Side
- Optional drop plate to meet aesthetic preference.
- Available in ALUM 689 or DKBZ 695 finish.
- 12-9/32" x 7-1/16" x 3/16"



6440-18TJ
COMPACT Drop Plate – Top Jamb
- Optional drop plate to meet aesthetic preference.
- Available in ALUM 689 or DKBZ 695 finish.
- 12-9/32" x 7-1/16" x 3/16"



6440-18PA
COMPACT Drop Plate – Door Mount Parallel Arm
- Optional drop plate to meet aesthetic preference.
- Available in ALUM 689 or DKBZ 695 finish.
- 12-9/32" x 7-1/16" x 3/16"

ALLEGION

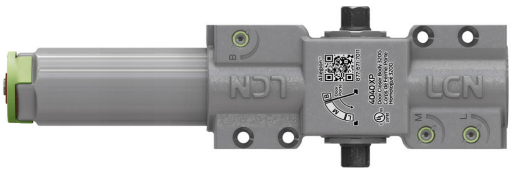
CDH

Commercial Doors & Hardware Ltd.
2150 Winston Park Drive, Unit 16
Oakville, L6H 5V1

Ecole Elenentaire Antonine-Maillet Elev & office CSV
615 Ridgeway Ave, Oshawa

Submittal Date: Mar 9/26, MAR 12/26

4040XP Series



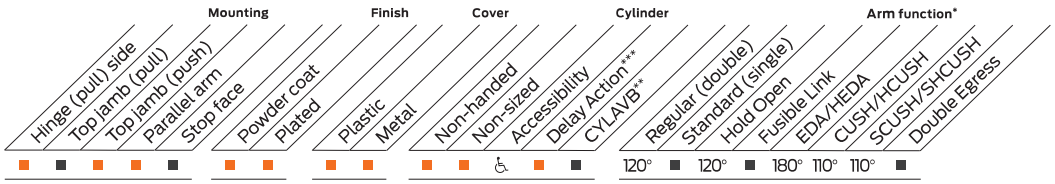
The 4040XP Series is LCN's most popular door closer—and for good reason. This durable non-handed, surface-mounted heavy-duty closer, is designed for the most demanding high-use-and-abuse applications as well as for easy installation and maintenance.

Features

Certifications	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 hour salt spray, meets BAA - Buy American Act
Body construction	▪ Patented positive stop ▪ Patented regulation valve indicators ▪ Independent speed adjustments ▪ QR code for instructions and support ▪ Cast iron body ▪ Full complement bearing ▪ 1 ½" diameter piston ▪ Double heat treated pinion journal
Fluid	All weather liquid X fluid
Handing	Non-handed
Templating	Peel-n-Stick templates - 2 ¼" x 5" mounting hole pattern
Size	Adjustable spring size 1-6, includes LCN Green Dial
Warranty	30 years

Cover	▪ Redesigned snap-fit plastic cover (PC) with improved retention fit, standard ▪ Metal Cover (MC), optional
Fasteners	Self reaming and tapping screws (SRT)
Mounting	Hinge (pull side), top jamb (push side), parallel arm (push side)
Arms	Regular arm
Finishes/colors/ powder coat	▪ 622 Matte black ▪ 689 Aluminum ▪ 690 Statuary bronze ▪ 691 Light bronze ▪ 693 Black ▪ 695 Dark bronze ▪ 696 Brass ▪ Custom colors optional
	▪ Optional SRI primer - powder coat only ▪ Optional plated finishes

Special templates | Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.



■ Available
■ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening/hold open point with standard template.
** Advanced Variable Back Check.
*** Delay feature incorporates standard 4040 cylinder (not XP).

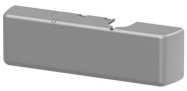
Accessories

Cylinders

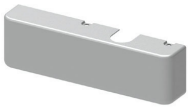
4040XP-3071
Cast iron cylinder assembly (CYL)
- Non-handed
- Heavy duty

4041-3071 DEL
Delay Action Cylinder (CYLDEL)
- Used for delayed action closing
- Non-handed
- Heavy duty

Covers



4040XP-72
plastic cover (PC)
- Non-handed
- Includes 4040XP-54 snap-on cover clip
- Redesigned patented snap-fit cover with improved retention fit



4040XP-72MC
metal cover (MC)
- Handed
- Required for plated finishes and custom powder coat finishes
- Optional

Arms

4040XP-3077
Regular Arm (REGARM)
- Non-handed
- Mounts pull side or top jamb with shallow reveal P4041 closer includes PA shoe, 4040XP-62PA required for parallel arm mounting

4040XP-3077L
Long Arm (LONG)
- Non-handed
- Includes long rod and shoe, 4040XP-79LR for top jamb mount
- Optional

4040XP-3077ELR
Extra Long Arm (XLONG)
- Non-handed
- Includes extra long rod and shoe, 4040XP-79ELR for top jamb mount with deep reveal
- Optional

4040XP-3049
Hold Open Arm (H)
- Non-handed
- Mounts pull side or top jamb with shallow reveal, hold open adjustable shoe
- 4040XP closer includes 4040XP-62PA shoe required for parallel arm mounting
- Optional

4040XP-3049L
Hold Open Long Arm (HLONG)
- Non-handed
- Includes long head and tube, 4040XP-3048L for top jamb mount
- Optional

4040XP-3077EDA
Extra Duty Arm (EDA)
- Non-handed
- Features forged, solid steel main and forearm for potentially abusive installations
- Optional

4040XP-3049EDA
Hold Open Extra Duty Arm (HEDA)
- Handed
- Parallel arm features forged, solid steel main and forearm for potentially abusive installations
- Hold open function is adjusted at the shoe
- Optional

4040XP-3077EDA/62G
Extra Duty Arm with 62G Thick Hub Shoe (EDAW62G)
- Non-handed
- Features forged, solid steel main and forearm for potentially abusive installations
- 62G shoe provides additional blade stop clearance
- Optional

4040XP-3049EDA/62G
Hold Open Extra Duty arm with 62G Thick Hub Shoe (HEDA62G)
- Handed
- Features forged, solid steel main and forearm for potentially abusive installations
- 62G shoe provides additional blade stop clearance; hold open function is adjusted at the shoe
- Optional

4040XP-3077CNS
Cush-n-Stop Arm (CUSH)
- Non-handed
- Features solid forged steel main arm and forearm with stop in soffit shoe.
- Optional

4040XP-3049CNS
Hold Open Cush-n-Stop Arm (HCUSH)
- Non-handed
- Hold open function with templated stop/hold open points
- Handle controls hold open function
- Optional

Accessories

Arms (cont.)

4040XP-3077SCNS
Spring Cush-n-Stop Arm (SCUSH)
- Non-handed
- For potentially abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
- Optional

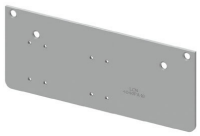
4040XP-3049SCNS
Spring Hold Open Cush-n-Stop Arm (SHCUSH)
- Non-handed
- For potentially abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
- Handle controls hold open function
- Optional

Installation accessories

4040XP-18
Plate
- Required for hinge side mount where top rail is less than 3 3/4" (95 mm)
- Requires minimum 2" (51 mm) minimum top rail

4040XP-18G
Plate
- Locates top jamb mounted closer flush with top of head frame face in flush ceiling condition
- Requires 1 3/4" (44 mm) minimum head frame

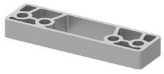
4040XP-18TJ
Plate
- Centers top jamb mounted closer vertically on head frame where face is less than 3 1/2" (89 mm). Plate requires 1 3/4" (44 mm) minimum head frame



4040XP-18PA
Plate
- Required for parallel arm mounting where top rail is less than 5 1/2" (140 mm), measured from the stop
- Requires 2" (51 mm) minimum top rail

4040XP-62PA
PA shoe
- Required for parallel arm mounting

4040XP-30
CUSH shoe support
- Provides anchorage for fifth screw used with CUSH arms, where reveal is less than 3 1/16" (78 mm)
- Optional



4040XP-61
Blade stop spacer
- Required to lower parallel arm shoe to clear 1/2" (13 mm) blade stop
- Optional

4040XP-419
PA flush panel adapter
- Provides horizontal mounting surface for parallel arm shoe on single rabbeted or flush frame
- Optional

4040XP-62A
Auxiliary shoe
- Requires a top rail of 7" (178 mm)
- Shoe replaces -62PA for parallel arm mounting of regular arm with overhead holder/stop
- Optional

4040XP-54
Snap-on cover clip
- Used to secure 4040XP-72 plastic cover to cylinder body

Finishes

Standard powder coat finishes

LCN powder coating provides superior protection against the effects of weather conditions and is an environmentally friendly process. The high quality finish is chip resistant. Corrosion resistance surpasses 100 hours salt spray testing (four times the industry standard). Non-metallic components also provide the same high resistance to the effects of the elements. All LCN products must be shipped with a finish.

LCN standard finishes (ANSI/BHMA number):

622 Matte Black

689 Aluminum

690 Statuary Bronze

691 Light Bronze

693 Gloss Black

695 Dark Bronze

696 Brass

Optional custom powder coat finishes

LCN offers custom powder coating to provide a custom appearance and all the corrosion resistance of standard powder coat finishes at a nominal additional cost. LCN uses the RAL numbering system for the 150+ custom colors available. Contact your local RSO representative for a brochure showing the available custom colors.

Note: Custom powder coat finishes require a metal cover.

Optional plated finishes

Visible components such as metal covers, arms, fasteners, and finish plates are plated to match the selected finish. Surface mounted tracks are powder coated to compliment the plated finish. Hidden assemblies such as cylinders, tracks, and mounting plates are supplied with a powder coated finish. Plated finishes require handing of closers.

Plated finishes:

616 Satin Bronze, Blackened
632 Bright Brass
633 Satin Brass
639 Satin Bronze
646 Satin Nickel
651 Bright Chrome
652 Satin Chrome

Special Rust Inhibitor (SRI) process

For installations where a higher level of protection against weather conditions, or the effects of a potentially corrosive atmosphere is required, LCN offers a Special Rust Inhibitor (SRI) process. Ferrous metal components receive an SRI pretreatment and a standard powder coat finish of your choice, or a custom powder coat finish for a nominal additional cost. Closers treated with the SRI process exceed the 100 hour protection level available with standard LCN powder coated finishes. For details, contact your local RSO representative or the LCN factory.

Standard anodized finishes

LCN Senior Swing and Benchmark electromechanical automatic operators are offered with an anodized finish. Anodizing is an electrochemical process that thickens and toughens the protective oxide on aluminum metal.

LCN anodized finishes:

628 Aluminum, Clear Anodized
710 Dark Brown, Anodized

Materials

The LCN offering consists of well-made, reliable, long-lasting products that work in real-life applications. In addition to the mechanical advantages derived from proven designs, much of the durability of the closer and arm system is directly related to the materials used in their manufacturing.

Precision machined cast iron cylinders and forged steel pistons work together because of the compatibility of their basic elements. Heat-treated pinions and pistons spread the load over a large gear tooth system to better handle the wear and stress of millions of operating cycles. Upper and lower full complement pinion bearings provide the support and load capacity required by the design of the closer. All-weather fluid, Liquid X, reduces the amount of adjustments and maintenance needed and ensures consistent performance through every season.

Forged steel main arms are a durable alternative to lower-cost stamped steel arms. Specially designed shoe and elbow joints help each closer fit securely onto a variety of opening applications. A state-of-the-art, powder coat process delivers a high quality, corrosion resistant finish on all metal parts in popular architectural finishes.

Through state-of-the-art equipment, processes and people, we believe LCN will continue to provide the best solutions for our customers.

SCHLAGE

ND Series

Grade 1 Cylindrical Locks

Mechanical | Wired Electrified | Wireless Electronic

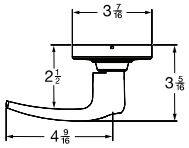
SCHLAGE | ALLEGION

Commercial.Schlage.com

Trims & Finishes

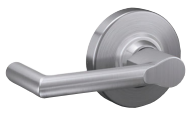
Lever Designs & Finishes

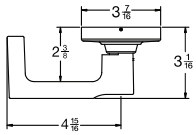
Athens (ATH)



Cores *KIL, FSIC, SFIC, L-CO, L-SA, J-CO6, J-ME, J-SA, J-YA6*

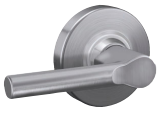
Boardwalk (BRK)[1]

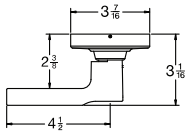




Cores *KIL, FSIC, SFIC*

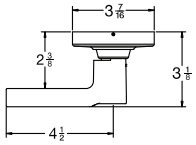
Broadway (BRW)





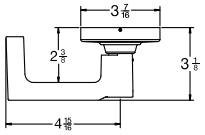
Cores *KIL, FSIC, SFIC*

Latitude (LAT)



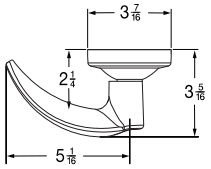
Cores *KIL, FSIC, SFIC*

Longitude (LON)[1]



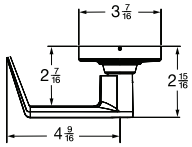
Cores *KIL, FSIC, SFIC*

Omega (OME)[1]



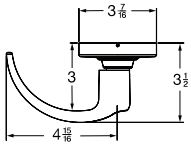
Cores *KIL, FSIC, SFIC*

Rhodes (RHO)[1]



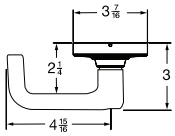
Cores *KIL, FSIC, SFIC, L-CO, L-SA, J-CO6, J-CO7, J-ME, J-SA, J-YA6, J-YA7*

Sparta (SPA)[1]



Cores *KIL, FSIC, SFIC, L-CO, L-SA, J-CO6, J-ME, J-SA, J-YA6*

Tubular (TLR)[1]



Cores *KIL, FSIC, SFIC, L-CO, L-SA, J-CO6, J-ME, J-SA, J-YA6*

Finishes

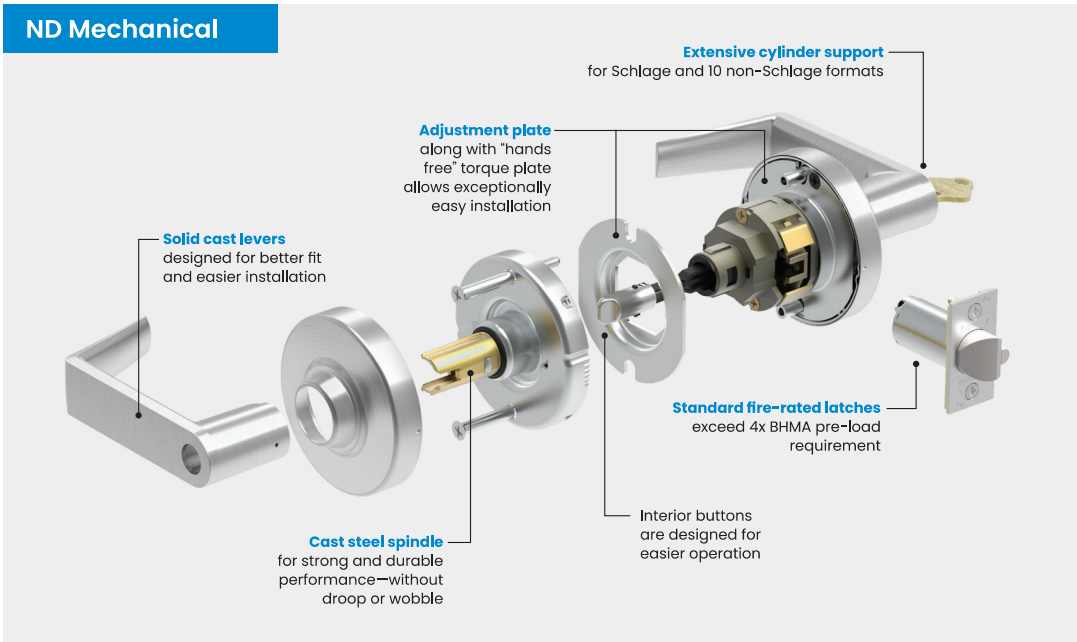
605 Bright Brass	606 Satin Brass	612 Satin Bronze	613[2] Oil Rubbed Bronze	619 Satin Nickel	622 Matte Black	625 Bright Chrome	626/626AM Satin Chrome/ Antimicrobial	630[3] Satin Stainless Steel	643e Aged Bronze

1. Boardwalk, Longitude, Omega, Rhodes, Sparta, and Tubular levers comply with California state code for return within 1/2" of door face.
2. NDE wireless electronic locks not available in 613 finish.
3. Available on HSLR trim only.

CDH
Commercial Doors & Hardware Ltd.
2150 Winston Park Drive, Unit 16
Oakville, L6H 5V1

Ecole Elenentaire Antonine-Maillet Elev & office CSV
615 Ridgeway Ave, Oshawa

Submittal Date: Mar 9/26, MAR 12/26



Quality You Can See and Feel

Strength and durability are more than numbers, you can actually feel it in the lock — in the weight and movement of the lever and in the lasting beauty of the finish. Expect exceptional durability from ND Series.

- Tested to over 16 million cycles with near zero droop or wobble in the lever (16x the BHMA requirement)
- Latch retraction with 200 lb preload for confident operation in warped and preloaded doors (4x BHMA requirement)
- Prevents access even when subjected to torque loads up to 3,100 in-lbs (2.6x the BHMA standard)
- Withstands pry bar attacks of 1,600 lbs (8x BHMA requirement)
- Withstands 100 sledgehammer blows (20x BHMA requirement)

The Added Benefits of Layered Key System Security

A strong lock is only part of the security equation for mechanical locks–proper key security is equally important.

- Patented Everest 29™ cylinders prohibit unauthorized key duplication at local retail stores
- Dealer and end user restricted, geographically exclusive Primus cylinder options for advanced key control
- Available compatibility with 10 different non-Schlage key systems

Key Features

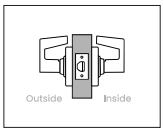
ND Series offers Schlage's widest array of finishes, styles and functions available in a cylindrical lock.

- 25 mechanical, cylindrical functions plus eight that feature Vandlgard® locked lever protection
- Nine standard finishes, plus an antimicrobial coating option
- Nine ADA compliant lever options
- Status indication and ligature-resistant trim options
- BAA compliant
- Locks are ANSI/BHMA Grade 1 certified
- Available with lead lining
- UL Listed 3-hour fire rated
- Perfectly suited to the ALX Series Grade 2 cylindrical locks
- Supports Conventional, FSIC, and SFIC cylinder formats plus high-security UL 437 and competitive core options
- Multiple key system options include open, patented, restricted, and geographically exclusive

Mechanical Lock Functions

Non-Keyed Functions

Schlage **ND10** — **ANSI** **F75**

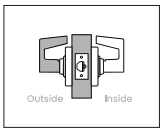


Passage latch

- Levers both sides; springlatch
- Latch retracted by lever from either side at all times
- Inside lever always free for immediate egress

To order configured with Request to Exit (RX), specify RX under special options.

Schlage **ND12** — **ANSI** **F89**

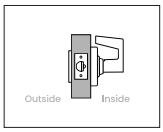


Exit lock

- Levers both sides; deadlatch
- Outside lever always fixed; latch retracted by inside lever
- Inside lever always free for immediate egress

To order configured with Request to Exit (RX), specify RX under special options.

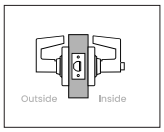
Schlage **ND25** — **ANSI** **–**



Exit lock with exterior blank plate

- Blank plate outside; lever inside; deadlatch
- Latch retracted by inside lever
- Inside lever always free for immediate egress

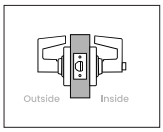
Schlage **ND30** — **ANSI** **F77**



Patio lock

- Lever outside; push button in lever inside; springlatch
- In unlocked state latch is retracted by either lever
- Outside lever is made inoperative by pushing button on inside lever
- Rotating inside lever retracts latch and releases button unlocking outside lever; closing door also unlocks preventing lock-out
- Inside lever always free for immediate egress

Schlage **ND40** — **ANSI** **F76**



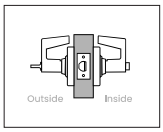
Bath/bedroom privacy lock

- Lever with emergency release recessed slot outside; push button in lever inside; springlatch
- In unlocked state latch is retracted by either lever
- Outside lever is made inoperative by pushing button on inside lever
- Rotating inside lever retracts latch and releases button unlocking outside lever; closing door also unlocks preventing lock-out
- Emergency unlock: an emergency key (sold separate) or small, flat screwdriver inserted in outside lever and turned releases button to unlock
- Inside lever always free for immediate egress

Note: Locks ordered with indicator trim fit 1-3/4" doors. Sold separate spacer kits allow application to doors 1-3/8" to 1-11/16".

To order an emergency key use part number 35-270.

Schlage **ND44** — **ANSI** **–**



Hospital privacy lock

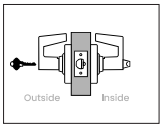
- Emergency turn in lever outside; push button in lever inside; springlatch
- In unlocked state latch is retracted by either lever
- Outside lever is made inoperative by pushing button on inside lever
- Rotating inside lever retracts latch and releases button unlocking outside lever; closing door also unlocks preventing lock-out
- Emergency unlock: rotating emergency turn in outside lever releases button to unlock
- Inside lever always free for immediate egress

Note: Locks ordered with indicator trim fit 1-3/4" doors. Sold separate spacer kits allow application to doors 1-3/8" to 1-11/16".

Mechanical Lock Functions

Keyed Functions

Schlage **ANSI**
ND53 **F109**



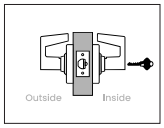
Entrance lock

- Lever with key cylinder outside; push/turn button in lever inside; deadlatch
- In unlocked state latch is retracted by either lever
- Outside lever is made inoperative by pushing button or pushing and turning button on inside lever; key outside does not lock
- **Pushed button unlocking:** key outside or rotating inside lever retracts latch and releases button unlocking outside lever
  Pushed/turned button unlocking: key outside or rotating inside lever retracts latch but does not unlock outside lever; rotate inside button to start position to allow button release and unlocking by key or by rotating inside lever
- Inside lever always free for immediate egress

Caution: Egress without fully releasing the push/turn button can result in lock-out situations.

Note: Locks ordered with indicator trim fit 1-3/4" doors. Sold separate spacer kits allow application to doors 1-3/8" to 1-11/16".

Schlage **ANSI**
ND60 with XN12-001 **-**

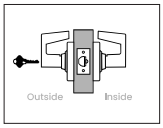


Vestibule lock with interior unlocking only

- Lever outside; lever with key cylinder inside; deadlatch
- In unlocked state latch is retracted by either lever
- Outside lever is locked or unlocked by key inside
- Inside lever always free for immediate egress

To order, specify function and note XN12-001 as a special option.

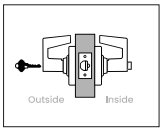
Schlage **ANSI**
ND70 **F84**



Classroom lock, exterior lockdown only

- Lever with key cylinder outside; lever inside; deadlatch
- In unlocked state latch is retracted by either lever
- Outside lever is locked or unlocked by key outside
- Inside lever always free for immediate egress

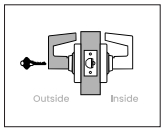
Schlage **ANSI**
ND73 **F90**



Corridor lock

- Lever with key cylinder outside; push button in lever inside; deadlatch
- In unlocked state latch is retracted by either lever
- Outside lever is made inoperative by pushing button on inside lever or by key outside
- **When locked by pushed button:** rotating inside lever retracts latch and releases button unlocking outside lever; closing door also unlocks preventing lock-out
  When locked by key: rotating inside lever retracts latch but outside lever remains fixed until unlocked by key outside
- Inside lever always free for immediate egress

Schlage **ANSI**
ND80 **F86**

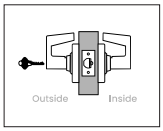


Storeroom lock

- Lever with key cylinder outside; lever inside; deadlatch
- Outside lever always fixed; latch retracted by inside lever
- Key in outside lever retracts latch only
- Inside lever always free for immediate egress

To order configured with Request to Exit (RX), specify RX under special options.

Schlage **ANSI**
ND81 **F86**



Accessible storeroom lock

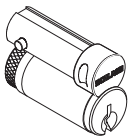
- Lever with key cylinder outside; lever inside; deadlatch
- Outside lever is always fixed when key is not present; latch retracted by inside lever
- Key outside turned counter-clockwise retracts latch; 180-degree clockwise rotation of key allows outside lever to retract latch
- Inside lever always free for immediate egress

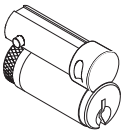
To order configured with Request to Exit (RX), specify RX under special options.

FSIC cylinders for Schlage and other manufacturers' locksets

Schlage FSIC cylinders (core only)

Security	Key mechanism	Pins	Patent protected keyway families	With logo	Less logo
Basic security Open keyways	Standard pin and tumbler	6	–[1]	23-030 30-120[2] (L9485/9486 faculty restroom)	23-031 30-121[2] (L9485/9486 faculty restroom)
	Check pin	6	S (Everest 29)		
Enhanced security Restricted use	Check pin	6	T (Everest 29)	23-030 30-120[2] (L9485/9486 faculty restroom)	23-031 30-121[2] (L9485/9486 faculty restroom)
	SL	7	R (Everest 29)	91-161	91-162
Upgraded security Primus level restricted use, geographic exclusivity, and independent sidebar	Legacy Primus	6	S, T (Everest 29)	20-740	20-741
	Primus RP	6	Obverse[1] (Classic)	20-740-RP	20-741-RP
	Primus XP	6	S, T (Everest 29)	20-740-XP	20-741-XP
	Primus XP SL	7	R (Everest 29)	91-861-XP	91-862-XP

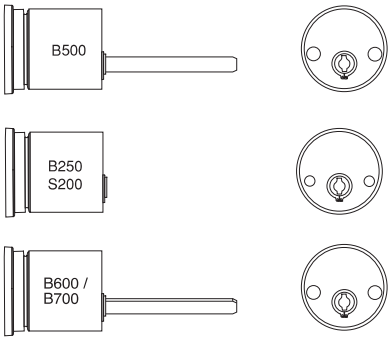




1. Out-of-patent keyways like Classic Obverse are available. Obverse, however, can gain patent protection in a Primus RP or XP cylinder. RP is recommended because patent coverage carries to 2029 versus 2024 for Primus XP.
2. Specify handing for faculty restroom/hotel cylinders.

FSIC housings for Schlage bored deadbolts and deadlocks, less core

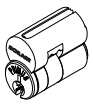
Lockset series	Description	Number	Specify finish
B500 Series	Outside	B610-203 (single) B610-205 (double)	605, 606, 609, 612, 613, 619, 625, 626, and 643e
	Inside	B610-028[1]	See note below
B250	Outside	22-061	605, 606, 609, 613, 625, 626
	Inside of B252	22-062	
S200 Series	Outside	S306-135	605, 606, 609, 612, 613, 625, 626
B600 / 700 Series	Outside	B610-203 (single) B610-205 (double)	605, 606, 609, 612, 613, 619, 625, 626, 643e
	Inside	B610-028	See note below



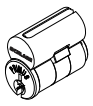
Specify finish of B610-031 inside snap-on faceplate ordered separately for B662/762, and B562.
1. Inside housing does not include snap-on faceplate.

Competitive LFIC formats in Schlage Everest 29 keyways

Security	Key mechanism	Pins	Patent protected Everest 29 keyway families	Corbin Russwin[1]	Sargent[1]
Basic security	Check pin	6	S	47492854	47492846
Enhanced security Restricted use	Check pin	6	T		
Upgraded security Primus level restricted	Primus XP	6	S, T	47505697	47505672



47505697



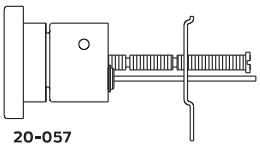
47505672

1. Use existing lock tailpiece driver. IMPORTANT: Primus installation will require field modification of driver.
NOTE: LFIC are the competitive equivalent of Schlage FSIC formats).

FSIC cylinders to use with rim and mortise exit devices

Security	Key mechanism	Pins	Patent protected keyway families	Rim cylinders for exit devices: Core and housing	Mortise cylinders for Von Duprin and other straight cam applications: Cylinder with compression ring, spring and blocking ring	Cylinder with compression ring and spring
Basic security Open keyways	Standard pin and tumbler	6	–[1]	20-057	20-061	26-091
	Check pin	6	S (Everest 29)			
Enhanced security Restricted use	Check pin	6	T (Everest 29)	20-057	20-061	26-091
	SL	7	R (Everest 29)	91-170	91-173	91-171
Upgraded security Primus level restricted use, geographic exclusivity, and independent sidebar	Legacy Primus	6	S, T (Everest 29)	20-757	20-771	20-763
	Primus RP	6	Obverse[1] (Classic)	20-757-RP	20-771-RP	20-763-RP
	Primus XP	6	S, T (Everest 29)	20-757-XP	20-771-XP	20-763-XP
	Primus XP SL	7	R (Everest 29)	91-870-XP	91-873-XP	91-871-XP
Housing less core				20-079	26-094	26-064

1. Out-of-patent keyways like Classic Obverse are available. Obverse, however, can gain patent protection in a Primus RP or XP cylinder. RP is recommended because patent coverage carries to 2029 versus 2024 for Primus XP.



20-057

Security	Key mechanism	Pins	Patent protected keyway families	Adams Rite MS, 4500 and 4700 Series, Lori 4500 Series, and Corbin Russwin DL3000 Series deadlocks/deadlatches: Cylinder with compression ring, spring and $^{3}/_{16}$" plus $^{3}/_{8}$" blocking rings	Cylinder with compression ring and spring	Adams Rite 4070 deadbolt: Cylinder with compression ring, spring and $^{3}/_{16}$" plus $^{3}/_{8}$" blocking rings
Basic security Open keyways	Standard pin and tumbler	6	–[1]	20-062	26-098	20-091
	Check pin	6	S (Everest 29)			
Enhanced security Restricted use	Check pin	6	T (Everest 29)	20-062	26-098	20-091
	SL	7	R (Everest 29)	91-174	91-172	91-175
Upgraded security Primus level restricted use, geographic exclusivity, and independent sidebar	Legacy Primus	6	S, T (Everest 29)	20-766	--	20-722
	Primus RP	6	Obverse[1] (Classic)	20-766-RP	--	20-722-RP
	Primus XP	6	S, T (Everest 29)	20-766-XP	--	20-722-XP
	Primus XP SL	7	R (Everest 29)	91-874-XP	--	91-875-XP
Housing less core				20-060[2]	--	20-090[2]

1. Out-of-patent keyways like Classic Obverse are available. Obverse, however, can gain patent protection in a Primus RP or XP cylinder. RP is recommended because patent coverage carries to 2029 versus 2024 for Primus XP.
2. Housing only **–** does not come with compression ring, spring, or blocking ring.

K510-711
Adams Rite MS cam

B520-378
Adams Rite 4070 cam

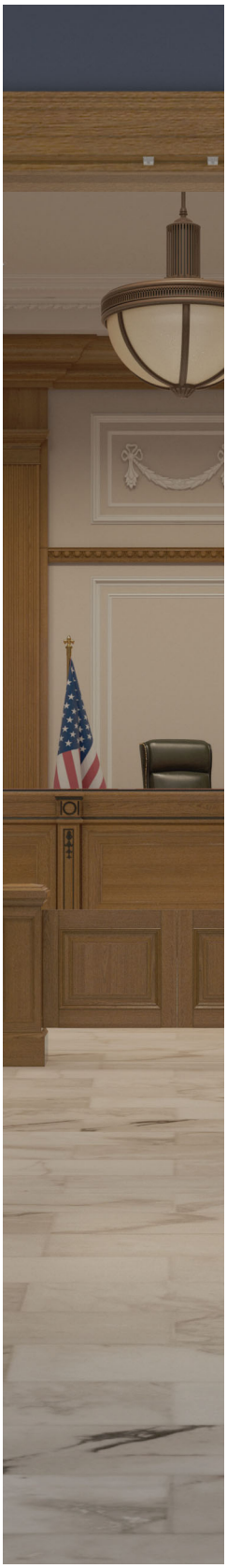
ALLEGION

CDH

Commercial Doors & Hardware Ltd.
2150 Winston Park Drive, Unit 16
Oakville, L6H 5V1

Ecole Elenentaire Antonine-Maillet Elev & office CSV
615 Ridgeway Ave, Oshawa

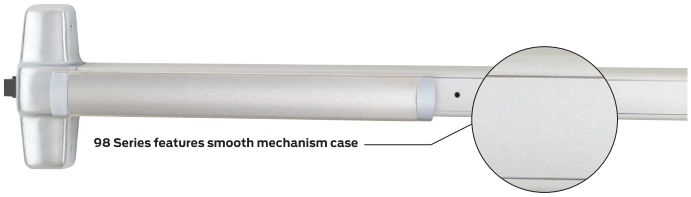
Submittal Date: Mar 9/26, MAR 12/26

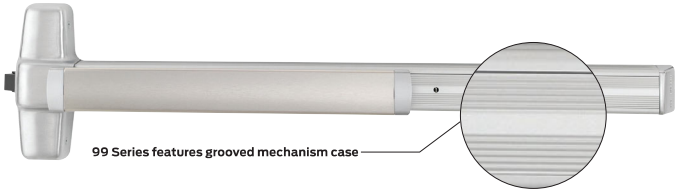


Engineered for value and performance

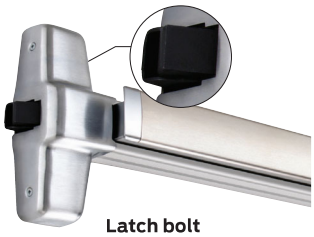
Von Duprin® empowers its customers to embrace change by providing flexible solutions that can be modified over time, protecting your investment well into the future. Von Duprin 98/99 Series push pad devices have a universal center case design that is unique to the industry and provides superior flexibility—from adding trim, switching handing or adding new retrofit options, you can configure numerous variations in the field without replacing your device.

Von Duprin's exit devices offer durable solutions that are proven in the field to perform under heavy use and abuse and backed by a team of experts experienced in door hardware application and code compliance. Allegion stands behind every Von Duprin product we make with unparalleled customer support thanks to our team of experts based in the U.S. that average more than 15 years of experience, so you are assured to receive expert advice.

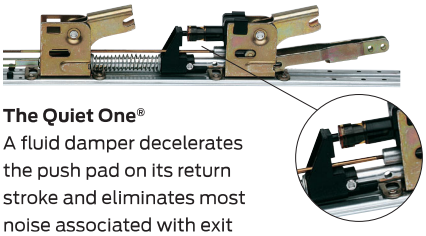




Von Duprin exit devices are available in two external surface styles, designated 98 and 99 Series.



Latch bolt
Deadlocking latch bolt provides security and improved performance at standard device cost.



The Quiet One®
A fluid damper decelerates the push pad on its return stroke and eliminates most noise associated with exit device operations. Furnished on all 98/99™ Series exit devices.

98-F/99-F Rim exit device

98-F and 99-F Rim fire exit devices are certified to ANSI/BHMA A156.3 2014, Grade 1 and UL listed for fire exit hardware. See page 69 for detailed information on UL fire exit hardware label and door opening size information. The 98-F device has a smooth mechanism case and the 99-F device has a grooved case. The rim device is non-handed except when the following device options are used: -2 (double cylinder) or SS (signal switch).

Specifications

Device functions	Device ships EO/DT/NL; Field selectable; For TP, K or L remove NL drive screw from device
Device lengths	3' 2'4" to 3' (711mm to 914mm) Door size 4' 2'10" to 4' (864mm to 1219mm) Door size
Device centerline from finished floor	39 13/16" (1011mm) 39 11/16" (1008mm) with mullion
Center case	8" x 2 3/4" x 2 3/8" (203mm x 70mm x 60mm)
Mechanism case	2 1/4" x 2 1/4" (57mm x 57mm)
Projection	Pushbar neutral – 3 13/16" (97mm) Pushbar depressed – 3 1/16" (78mm)
Latch bolt	Deadlocking, 3/4" (19mm) throw
Finishes	605, 606, 612, 626/626AM, 628, 710, 711 and 643e (619 and 630 available with 98 Series only)
Fasteners and sex bolts (SNB)	Includes screw pack for 1 3/4" (44mm) and 2 1/4" (57mm) thick metal or wood doors; Optional 425 SNB available for metal doors; 425 and 825 SNB required on wood doors without SLM blocking (See page 66 for quantities)

Accessories

299F Strike
Ships standard, optional strikes available

499F Strike
With 9854/9954 mullion

Features and options

Electrified options

LX	Latch bolt monitor switch
RX	Request to exit
RX2	Double request to exit
E	Electric locking and unlocking trim
EL	Electric latch retraction
ESL	Emergency secure lockdown
QEL	Quiet electric latch retraction
SS	Signal switch
CX	Chexit delayed exit
ALK	Alarm exit kit
WP-RX	Waterproof request to exit
CON	Allegion Connect

Mechanical options

-2	Double cylinder
-2SI	Double cylinder with security indicator
AX	Accessible device
GBK	Glass bead kit
PN	Pneumatic latch retraction
QM	Quiet mechanical
SNB	Sex bolts
SEC	Security screws
SLM	Special laminate material blocking
WH	Weep holes
XP	Extra protection

Dogging option
No mechanical dogging;
QEL options available

Strikes
299F – Dull black, 499F with mullions

Trim options

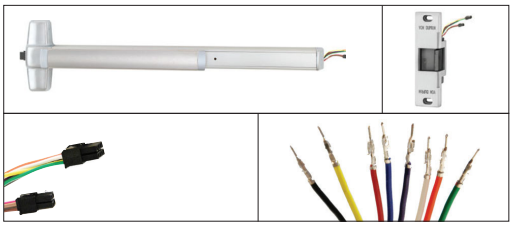
996 trim

Trim description					
Nomenclature	996EO	996L*	996L-NL*	996L-BE*	996L-DT
Trim function	Exit only plate	Lever	Lever-night latch	Lever-blank escutcheon	Lever-dummy trim
Function description	Exit only plate	Key locks and unlocks	Key retracts latch bolt	Always operable, no cylinder	Pull when dogged
ANSI function	01	08	03	14	02
Device compatibility					
98/99 Rim/Rim-F	■	■	■	■	■
XP98/XP99 Rim/Rim-F	■	■	■	■	■
98/9927/27-F	■	■	■	■	■
98/9947/47-F	■	■	■	■	■
98/9947WDC/WDC-F	■	■	■	■	■
98/9948/48-F	■	■	■	■	■
98/9949/49-F	■	■	■	■	■
98/9950WDC/50WDC-F	■	■	■	■	■
98/9952†	†	†	†	†	†
98/9957/57-F	■	■	■	■	■
98/9975/75-F	■	■	■	■	■
Dimensions					
Escutcheon plate size	2 3/4" x 10 3/4" x 27/32" (70 x 273 x 21mm)				
Pull center to center	—	—	—	—	—
Projection	—	2 7/8" (73mm)	2 7/8" (73mm)	2 7/8" (73mm)	2 7/8" (73mm)
Handing					
	—	Handed/reversible	Handed/reversible	Handed/reversible	Handed/reversible
Cylinder type					
Rim or vertical device	—	Rim	Rim	—	—
Mortise lock device	—	1 1/4" mortise	1 1/4" mortise	—	—

* Specify R/V if used for rim and vertical devices, M for mortise device. Example, 996L-R/V or 996L-M.

† Default trim is 252L /L-BE. Must be ordered as EO when paired with other trims (ordered separately).

Allegion Connect



Allegion Connect features common interconnect components for many cross-category electrified options. Allegion Connect is a quick and easy way to connect power sources. There is no wire cutting; reducing installation and maintenance time ultimately cutting cost. After installation, Allegion Connect continues to provide benefits throughout the lifetime of the opening by offering a service kit for repairs or modifications in the future.

Features and benefits

- Quick: common connections reducing installation time
- Perfect Connections: these factory installed connectors ensure the right wires match up every time
- Protective: the connectors protect the connection points throughout the installation process and lifetime of the opening
- Interchangeable: all Allegion Connect products utilize the same connectors
- Maintenance: you no longer need to cut away wire to disconnect Allegion products, also available is a service kit specifically for Allegion Connect products.

Harness length	Connectors on both ends	Connectors on one end, crimped pins on the other end
6 Inches	CON-6	CON-6P
12 Inches	CON-12	CON-12P
26 Inches	CON-26	CON-26P
32 Inches	CON-32	CON-32P
38 Inches	CON-38	CON-38P
44 Inches	CON-44	CON-44P
50 Inches	CON-50	CON-50P
192 Inches	CON-192	CON-192P
Power supply wire harness = connectors on one end, stripped leads on the other end.		
6 Inches	CON-6W - wire extension to power supply	

Consult door manufacturer for harness length requirements.

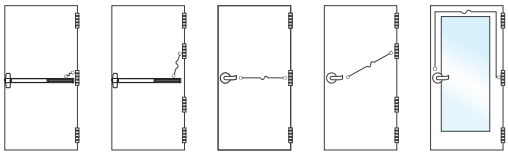
Note: You will need to purchase a separate wiring harness to go from exit device to hinge/EPT and an additional harness to go from hinge/EPT to power supply or access control system. Harness part numbers with ordering information can be located in the Schlage, Von Duprin and Falcon price books. A service kit is available for order in the Schlage, Von Duprin and Falcon price books. Included in this kit are male end plugs, female end plugs and pins to customize harnesses to your application.

Note: Must be ordered with exit devices and locks

To order, specify:

1. Specify CON for Connect electronic options
   Example: QEL-99-EO-CON
   (99 Series quiet electric latch retraction exit only with Connect connectors)
2. Specify harness length; Consult door manufacturer for harness length
3. Specify Von Duprin EPT10-CON or Ives electrical thru-wire hinge

Wire run options



Additional information

Lever styles and finishes

Decorative levers


M51 [2]


M52 [2]


M53


M54


M55


M56


M57 [1]


M61 [3]


M62 [1,3]


M63 [3]


M81 [2]


M82


M83


M84


M85 [3]


ME1 [2,3,4]


ME2 [2,3,4]


ME3 [2,3]

1. Available in stainless steel substrate ONLY.
2. Knurling available, specify KN when ordering.
3. Handed.
4. Designed with Gensler as product design consultant.

Standard levers


01


02 [2]


03 [1,2]


05


06 [1,2] (Default lever)


07 [2]


12 [3]


16 - Omega


17 [1,2]


18


ACC - Accent [3]


AST - Asti [3]


MER - Merano [3]


LAT [1] - Latitude


LON [1] - Longitude

1. Available in Stainless Steel - specify SS when ordering.
2. Knurling available, specify KN when ordering.
3. Handed.

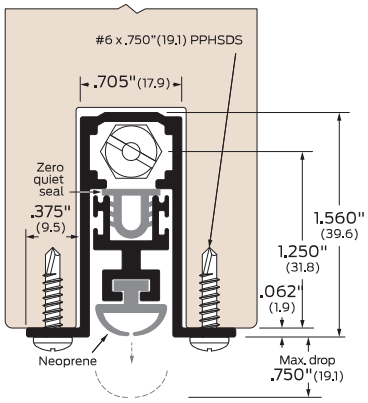
Finish options*						
Color	Bright Brass	Satin Brass	Satin Bronze	Satin Nickel	Matte Black/ Anodized	Bright Chrome
ANSI/BHMA number	605	606	612	619	622/711	625

Finish options*						
Color	Satin Chrome	Aluminum, anodized	Satin Stainless	Aged Bronze	Black Paint	Dark Brown, Anodized
ANSI/BHMA number	626/626AM†	628	630/630AM†	643e	693	710

* Durable powder coated finishes available at special request. Please contact factory.
† AM = Antimicrobial

Regular duty

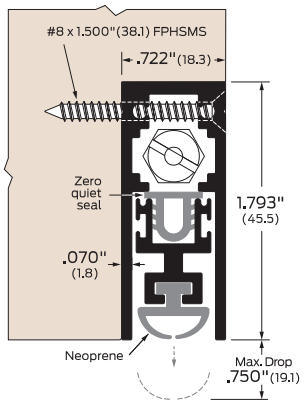
350



Finish: AA
Options: LS, PL
ANSI/BHMA: 350AA R3B3241

Mortised. Supplied with solid neoprene extrusion. Lengths 60-96" available as engineering specials.

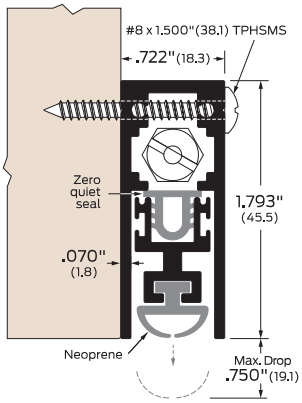
352



Finishes: AA, BK, D, G
Options: LS, PL, SEC, LK
ANSI/BHMA: 352AA, 352BK, 352D, 352G R3B3441

Semi-mortised. Supplied with solid neoprene extrusion. Lengths 60-96" available as engineering specials.

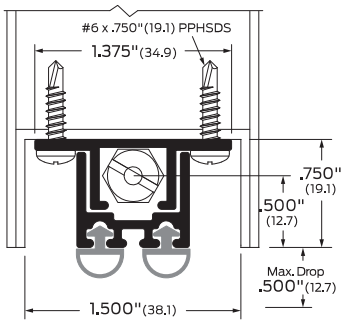
351



Finishes: AA, BK, D, G
Options: LS, SEC, PL, LK
ANSI/BHMA: 351AA, 351BK, 351D, 351G R3B3341

Surface-mounted. Supplied with solid neoprene extrusion. Lengths 60-96" available as engineering specials.

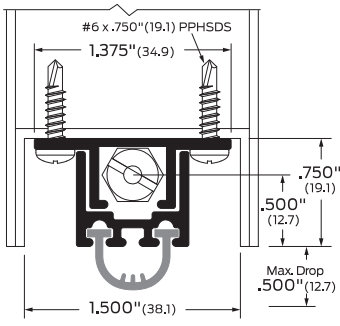
355



Finish: AA
Option: FLO
ANSI/BHMA: 355A R3E3241

For use with hollow metal doors. Mortised. Supplied without end caps.

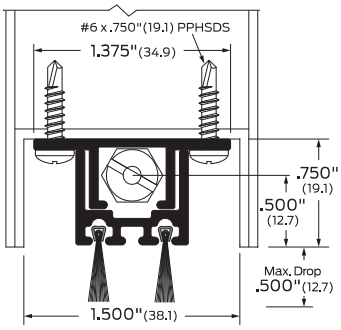
3551



Finish: AA
ANSI/BHMA: 3551AA R3B3241

For use with hollow metal doors. Mortised. Supplied without end caps.

3552



Finishes: AA
Option: FLO
ANSI/BHMA: 3552AA R3B3261

For use with hollow metal doors. Mortised. Supplied without end caps.

All items on this page:

BHMA CERTIFIED

See ADB Accessories & options page for details.

Finishes:

AA	Aluminum clear anodized
BK	Aluminum black anodized
D	Aluminum dark bronze anodized
G	Aluminum gold anodized

Options:

LS	Light spring
FLO	Air flow / sound block
PL	Pull out
SEC	Torx security screws
LK	Locking key

Note:

Maximum order length is 60" unless noted otherwise.

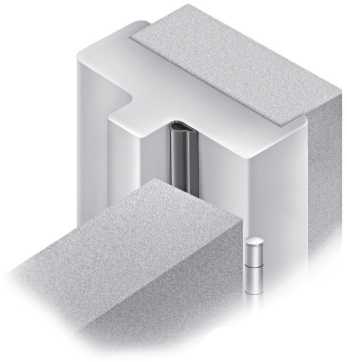
Lengths 10" - 18" available only with light spring drop mechanism. Not recommended for maximum drop greater than .500".

Except where noted, all models on this page are shipped in standard LH/RHR configuration with locking screw concealed (facing the door). Handing is reversible.

Weatherstripping

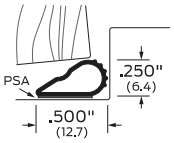
Self-adhesive weatherstripping

Solid neoprene and silicone seals



188 /488

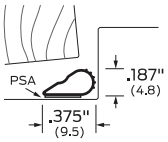
188S/188FS/188BIO



Material/ Finishes:		Options:	ANSI/BHMA:
S:	BK, BR, CL, GY, WH	ZAG	188S
FS:	BK	ZAG	R0E151
BIO:	BR	ZAG	188FS
			R0U154

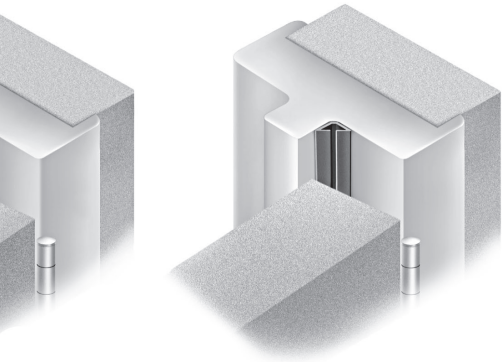
S: PSA standard.
FS: Intumescent rubber for fire and smoke protection. PSA standard.
BIO: BioWall antimicrobial rubber. PSA standard.

488S/488FS/488BIO



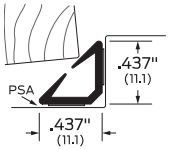
Material/ Finishes:		Options:	ANSI/BHMA:
S:	BK, BR, CL, GY, WH	ZAG	488S
FS:	BK	ZAG	R0E154
BIO:	BR	ZAG	488FS
			R0U154

S: PSA standard.
FS: Intumescent rubber for fire and smoke protection. PSA standard.
BIO: BioWall antimicrobial rubber. PSA standard.



8144

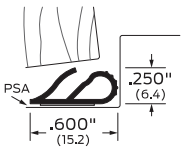
8144S/8144FS



Finishes:		Options:	ANSI/BHMA:
S:	BK	ZAG	8144S
FS:	BK	ZAG	R0E154
			8144FS
			R0U154

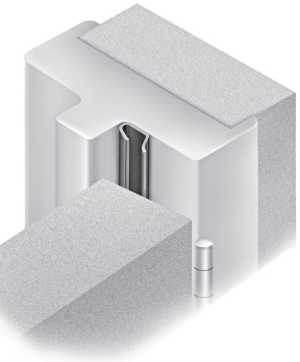
S: PSA standard.
FS: Intumescent rubber for fire and smoke protection. PSA standard.

8145S



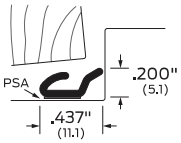
Finish:	Option:	ANSI/BHMA:
BK	ZAG	8145S
		R0E154

PSA standard.



8042

8042S



Finish:	Option:	ANSI/BHMA:
BK	ZAG	8042S
		R0E154

PSA standard.

All items on this page:

BHMA CERTIFIED

See Weatherstripping Accessories & options page for details.

Finishes:

BK	Black
BR	Brown
CL	Clear
GY	Gray
WH	White
B	Architectural mill finish bronze

Option:

ZAG	Ligature-resistant gasketing

PowerSwing™

Automatic Swing Door Operator

Make Any Door An Automatic Door

Besam, the world's leader in commercial entryway solutions, offers an ADA compliant swing door operator for your existing door. In addition to complimenting your entryway, Besam's high-quality PowerSwing operator is reliable, convenient and safe.

The PowerSwing operator allows you the flexibility to make any existing swing door an automatic door. Efficient, cost-effective and flexible, the PowerSwing provides your existing swing door with affordable, ADA compliance as well as years of dependable performance.

The Besam PowerSwing electro-hydraulic operator is designed for a wide variety of applications and offers many benefits and features:

- Quiet, strong and aesthetically pleasing.
- Suitable for both pedestrian and low energy applications.
- Suitable for hospital corridors, schools, government and office buildings.
- Readily fixed to existing structures with little or no modification.
- Attractive aluminum cover available in clear, bronze or a wide variety of custom colors and finishes.

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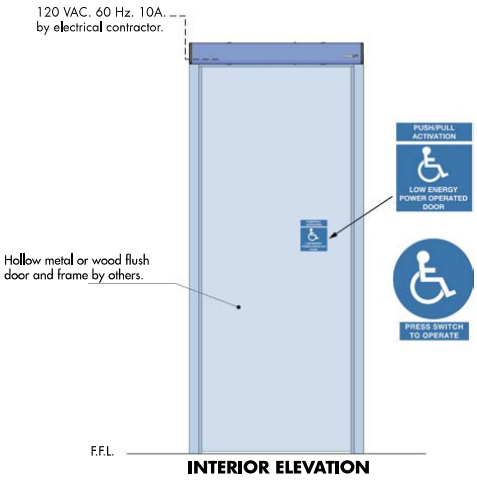
ASSA ABLOY

ASSA ABLOY, the global leader in door opening solutions

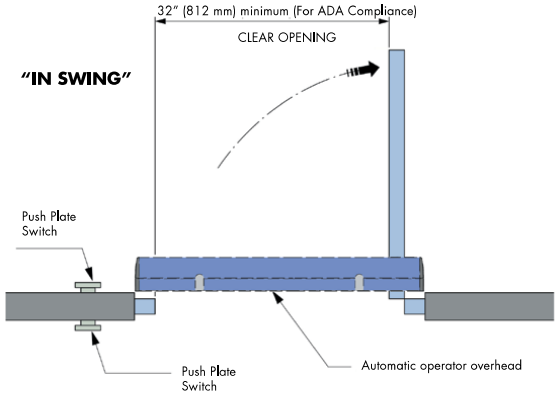
PowerSwing™

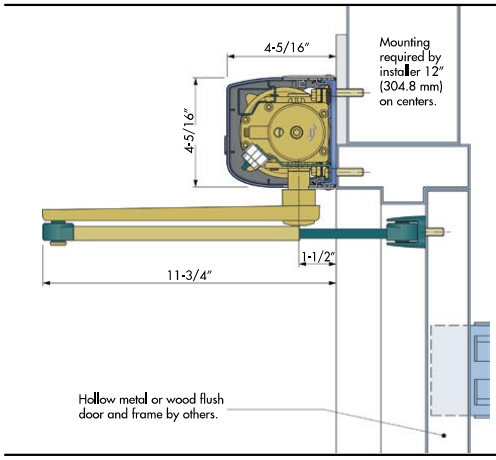
Rugged, Durable Construction

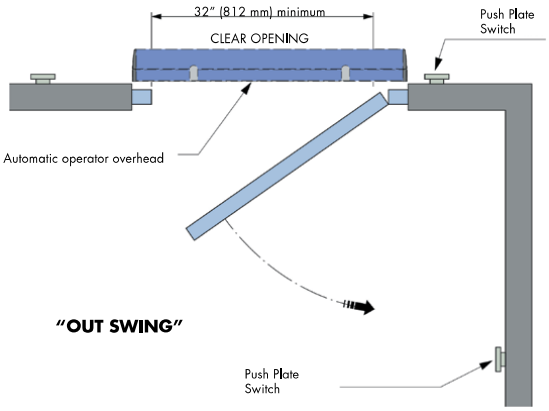
The PowerSwing meets and exceeds all handicap codes and ADA requirements. It is perfect for use in a variety of applications such as medical centers, offices, retail stores, educational facilities and assisted living homes. Optional UL rated fire door packages are also available with the PowerSwing operator.



INTERIOR ELEVATION







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ASSA ABLOY

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Besam follows a policy of advancements in development. For this reason, specifications may be changed without notice.

REVISE SECTION 14 00 00 General

CHANGE 1.3 Maintenance: warranty period

.2 This maintenance to begin at Substantial Performance and end **36 months** after Substantial Performance.

CHANGE 1.61 Warranty of Work

.2 Make good defects not due to improper use which may develop within **three years** from the date of Substantial Performance of the project.

END OF ADDENDUM 1

1. REMOVE AND DEMOLISH EXISTING MILLWORK, TACKBOARDS AND CHALKBOARDS AS SHOWN DOTTED
REMOVE EXISTING GYPSUM BOARD AND FURRING ON EXISTING MASONRY WALL
MAKE GOOD EXISTING SUBSTRATE

2. RECONFIGURE EXISTING CLASSROOM AND CONVERT IT TO OFFICE AREA
PROVIDE GYPSUM BOARD PARTITIONS, SOLID WOOD DOORS AND PS FRAMES AND HARDWARE
PAINT ENTIRE AREA

3. REMOVE AND DISPOSE OF EXISTING FLOORING AND WALL BASE
STRIP AND CLEAN SUBSTRATE OF RESIDUAL SEALANT
PROVIDE VCT FLOORING AND RUBBER BASE

4. REMOVE AND DEMOLISH EXISTING DOOR AND FRAME
REMOVE EXISTING FACE BRICK, WOOD STUD WALL AND EXISTING TERRAZZO WALL BASE
PROVIDE PARTITION WALL TYPE P3 WITH TERRAZZO WALL BASE TO MATCH EXISTING AT LOBBY C201

5. PROVIDE MILLWORK WITH SINK – SEE MECHANICAL

6. PROVIDE PLUMBING FIXTURES, WASHROOM ACCESSORIES – SEE MECHANICAL

7. REMOVE EXISTING UNIT VENTILATOR ASSEMBLY – SEE MECHANICAL
STRIP WALL TO EXISTING SUBSTRATE
CLEAN, REPAIR AND PREPARE SUBSTRATE
REMOVE EXISTING LOUVRE
REMOVE AND CLEAN RESIDUAL SEALANT AT MASONRY OPENING
INFILL OPENING TO MATCH EXISTING WALL ASSEMBLY

8. PROVIDE HM WINDOW FRAME AND GLAZING WITH 1 HR FIRE RESISTANCE RATING

9. REMOVE AND DEMOLISH EXISTING DOOR AND FRAME AND WINDOW
REMOVE EXISTING FACE BRICK, WOOD STUD WALL AND EXISTING TERRAZZO WALL BASE
PROVIDE PARTITION WALL TYPE P2 WITH TERRAZZO WALL BASE TO MATCH EXISTING AT LOBBY C201

10. REMOVE AND DEMOLISH EXISTING MASONRY PARTITION WALL
REMOVE AND DEMOLISH EXISTING DOOR AND FRAME AND HARDWARE

11. PREPARE EXISTING SUBSTRATE
PRIME AND PAINT ENTIRE ROOM

12. COUNTER PROVIDED BY THE BOARD

13. REMOVE AND DEMOLISH EXISTING FURNITURE SHOWN DOTTED
MAKE GOOD EXISTING WALLS

14. SAWCUT AND MAKE GOOD EXISTING CONCRETE SLAB AS REQUIRED TO ACCOMMODATE SERVICE LINES – SEE MECH.

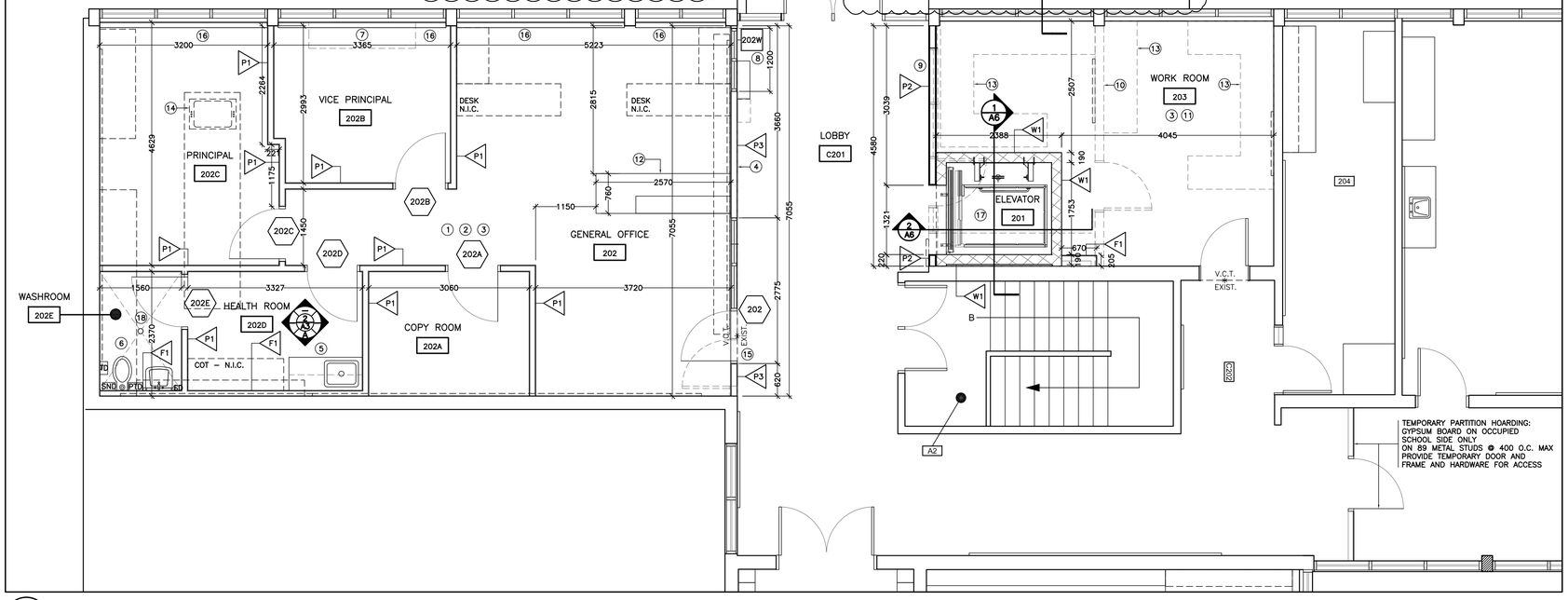
15. PROVIDE HM DOOR, FRAME, HARDWARE AND SIDELIGHT WITH 1HR FIRE RESISTANCE RATING

16. REMOVE EXISTING RADIATOR ASSEMBLY – SEE MECHANICAL
STRIP WALL TO EXISTING SUBSTRATE
CLEAN, REPAIR AND PREPARE SUBSTRATE
PROVIDE RADIATOR WITH COVER – SEE MECHANICAL
MAKE GOOD

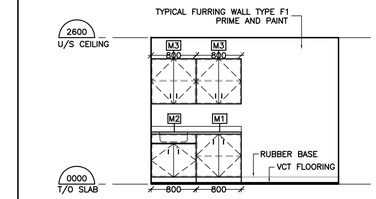
17. SAVARIA ORION LU/LA ELEVATOR
42" X 60"
MAKE GOOD
SUBMIT SHOP DRAWINGS

18. SAWCUT AND MAKE GOOD EXISTING SLAB FOR FD AND PIPES UNDER FLOOR SLAB

19. CAREFULLY SAWCUT EXISTING 50 CONCRETE TOPPING
EXERCISE DUE CARE TO AVOID CUTTING AND DAMAGE TO EXISTING WATERPROOF MEMBRANE BENEATH TOPPING
HAND CUT AS REQUIRED
CO-ORDINATE SITE REVIEW BY CONSULTANT TO VERIFY CONDITION OF EXISTING MEMBRANE PRIOR TO PROCEEDING WITH WORK
PROVIDE THROUGH-WALL FLASHING MEMBRANE
LAPPED INTO EXISTING WALL ASSEMBLY
OVER EXISTING CONCRETE CURB
AND LAPPED AND SEALED TO EXISTING WATERPROOF MEMBRANE
PROVIDE 50 CONCRETE TOPPING WITH 6% AIR ENTRAINMENT TO MATCH EXISTING
REFER TO DETAIL 6/A7

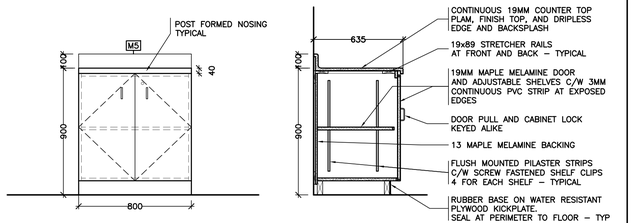


1 / A1 ENLARGED SECOND FLOOR PLAN 1:50



A / – HEALTH ROOM 202D SOUTH ELEVATION 1:50

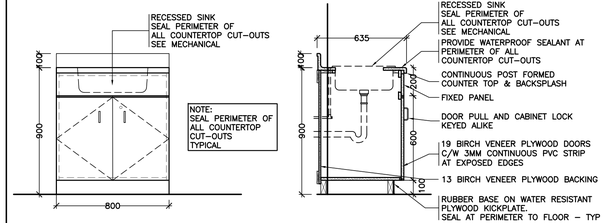
2 / A3 HEALTH ROOM 202D INTERIOR ELEVATION 1:50



A / – MILLWORK M1 ELEVATION 1:20

B / – MILLWORK M1 SECTION 1:20

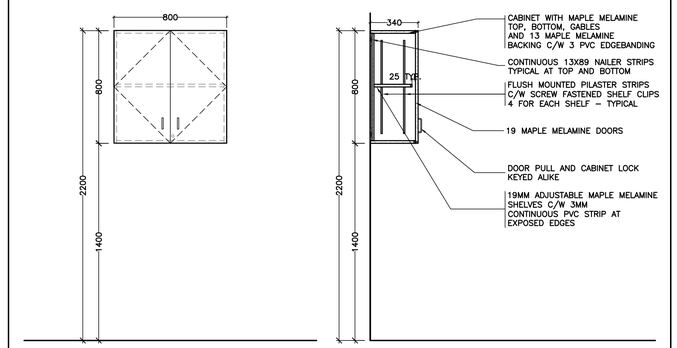
3 / A3 MILLWORK M1 DETAILS 1:20



A / – MILLWORK M2 ELEVATION 1:20

B / – MILLWORK M2 SECTION 1:20

4 / A3 MILLWORK M2 DETAILS 1:20



A / – MILLWORK M3 ELEVATION 1:20

B / – MILLWORK M3 SECTION 1:20

5 / A3 MILLWORK M3 DETAILS 1:20

Revisions

Ref.	No.	Description	Date	Initial
△		CONSULTANTS COORDINATION	2025/11/30	
△		CLIENTS REVIEW	2025/12/03	
△		CLIENTS REVIEW	2025/12/08	
△		CONSULTANTS COORDINATION	2025/12/16	
△		50% SUBMISSION	2025/12/23	
△		CONSULTANTS COORDINATION	2026/01/19	
△		CONSULTANTS COORDINATION	2026/02/09	
△		CONSULTANTS COORDINATION	2026/02/13	
△		CONSULTANTS COORDINATION	2026/02/24	
△		CONSULTANTS COORDINATION	2026/02/27	
△		ISSUED FOR TENDER	2026/03/02	
△		REVISED FOR TENDER	2026/03/03	
△		REVISED FOR ADDENDUM NO. 1	2026/03/13	

Project:

ECOLE ELEMENTAIRE
ANTONINE–MAILLET NEW
ELEVATOR & OFFICE RENOVATION
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OSHAWA, ON L1J 2W3

Liu Lim Architects inc.

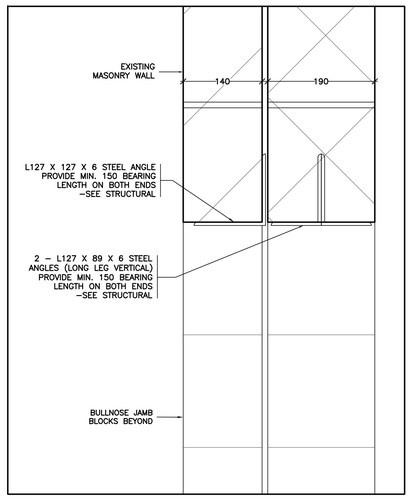
82 Bellagio Crescent,
Vaughan, Ontario, Canada L4K 5K7
Tel:(905)303–6606 Fax:(905)303–6636

Consultant:

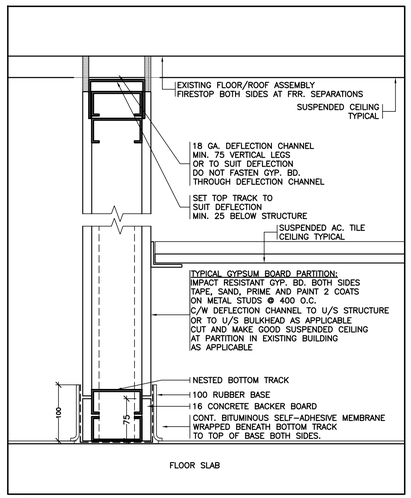
Title:

ENLARGED SECOND FLOOR PLAN
INTERIOR ELEVATION & MILLWORK DETAILS

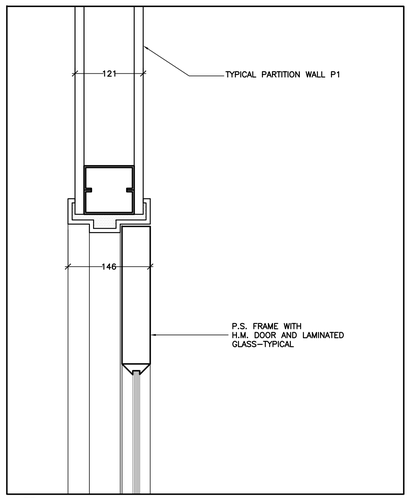
Drawn by: C.C.	Date: NOVEMBER 2025
Checked by: P.L.	Plotted:
Scale: AS SHOWN	Issued:
Job No.: 25116	Drawing No.: A3
Set No.:	of:



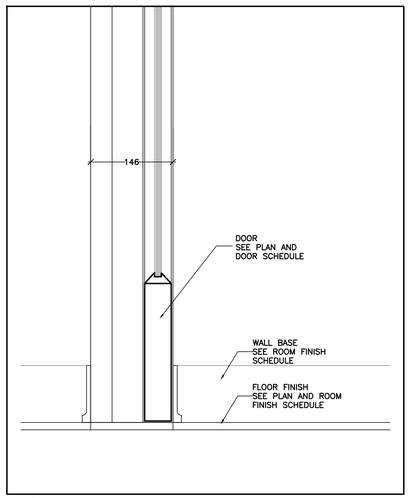
1 A6 INTERIOR OPENING DOOR HEAD SECTION 1:5



2 – TYPICAL GYPSUM BOARD PARTITION SECTION 1:5



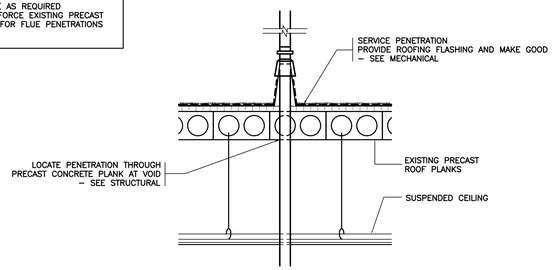
3 – TYPICAL INTERIOR DOOR HEAD SECTION 1:5



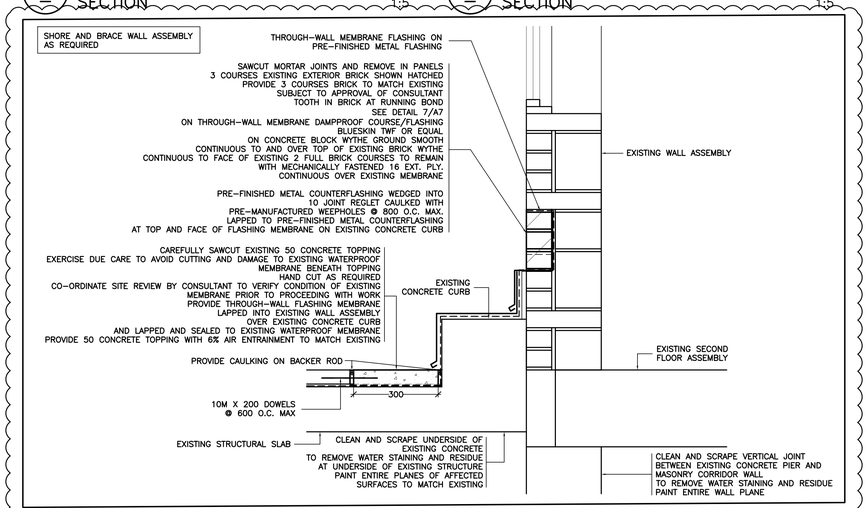
4 – TYPICAL INTERIOR DOOR JAMB SECTION 1:5

NOTES:

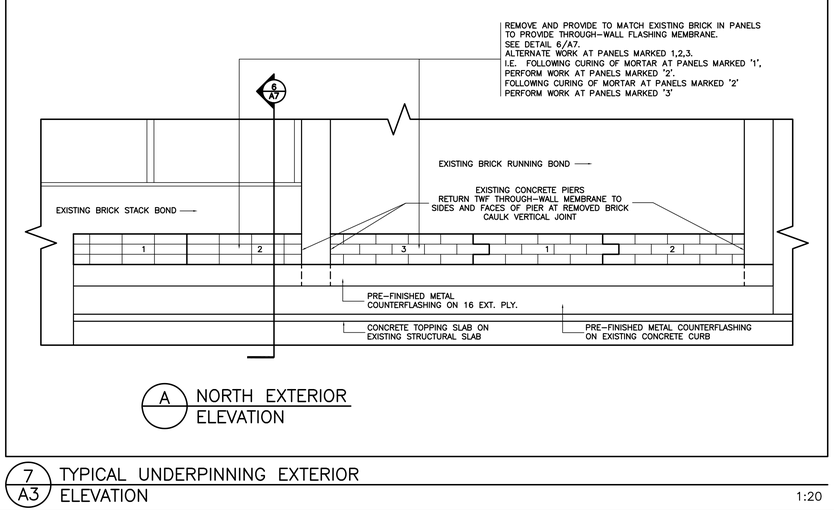
1. SAWCUT EXISTING PRECAST CONCRETE PLANK AND ROOF ASSEMBLY FOR FLUE PENETRATION MAKE GOOD
2. SHORE AND BRACE AS REQUIRED
3. SAWCUT AND REINFORCE EXISTING PRECAST CONCRETE PLANK FOR FLUE PENETRATIONS
4. SEE MECHANICAL



5 – TYPICAL PENETRATION DETAIL 1:20



6 A3 SECOND FLOOR EXTERIOR SECTION 1:10



A NORTH EXTERIOR ELEVATION

7 A3 TYPICAL UNDERPINNING EXTERIOR ELEVATION 1:20

Revisions

Ref.	No.	Description	Date	Initial
△		CONSULTANTS COORDINATION	2026/02/27	
△		ISSUED FOR TENDER	2026/03/02	
△		REVISED FOR TENDER	2026/03/03	
△		REVISED FOR ADDENDUM NO. 1	2026/03/13	

Project:

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Consultant:

Title:

SECTIONS AND DETAILS

Drawn by:	Date:
C.C.	NOVEMBER 2025
Checked by: P.L.	Plotted:
Scale: AS SHOWN	Issued:
Job No.: 25116	Drawing No.: A7
Set No.:	of:

Revised Designated Substance and Hazardous Materials Specifications– Pre-Renovation

École élémentaire Antonine-Maillet, 615 Ridgeway Avenue, Oshawa, Ontario

March 13, 2026

Arcadis Project No. 30305984

Part 1 General

1.1 Scope of Work

.1 Arcadis Professional Services (Canada) Inc. (Arcadis) was retained by the Conseil scolaire Viamonde (CSV) to conduct a pre-renovation designated substance and hazardous materials survey (DSHMS) of École élémentaire Antonine-Maillet, 615 Ridgeway Avenue, Oshawa, Ontario.

.2 The objective of the assessment was to identify designated substance and hazardous materials (DSHMs) in preparation for building renovation This assessment is intended to be used for renovation purposes only and may not provide sufficient detail for long term management of hazardous materials as required by Health and Safety regulations. The results of this assessment are intended for use with a properly developed scope of work and performance specification.

.3 The project consisted of a limited intrusive assessment of select areas of the building.

.4 The DSHMS was conducted using a visual assessment with intrusive methods and was comprehensive in scope. However, additional hazardous materials may be uncovered during renovation activities. Any suspect materials encountered should be managed as designated substances and hazardous materials unless sampling and laboratory analysis confirm otherwise.

.5 The following table summarizes the location of asbestos-containing materials and the suggested abatement method for the removal and handling of these materials. The bidding parties are responsible for the determination of the estimated quantities during the bidding process.

Designated Substance	Area	Material Description	Recommended Removal Measures
Asbestos	On pipe fittings above ceilings in Rooms 101 and 201	Thermal insulation	Type 2 glovebag asbestos procedures
	Room 101	(12”x12”) Vinyl Floor Tile – beige with dark brown and white directional flecks	Type 1 asbestos procedures without power tools.
	Room 101A	(9”x9”) Vinyl floor tile	Type 1 asbestos procedures without power tools.
	Rooms 202 and 203	(9”x9”) Vinyl floor tiles and associated mastic	Type 2 enclosure asbestos procedures with power tools attached to dust collecting devices equipped with HEPA filters.
	Room 201	Gypsum board with asbestos-containing drywall joint taping compound	Type 2 enclosure asbestos procedures .
	Room 202	Solid cement board panels	Type 1 asbestos procedures without power tools.
	Throughout the 1961 Era of construction	Concrete block-filler paint	Type 2 enclosure asbestos procedures with power tools attached to dust collecting devices equipped with HEPA filters.

.6 The following table summarizes the material description of designated substances and other hazardous materials and the suggested abatement method for the removal and handling of these materials. The bidding parties are responsible for the determination of the estimated quantities during the bidding process.

Designated Substance / Hazardous Material	Material Description	Recommended Action/Removal Measures
Lead	High-level lead paint (lead concentration greater than 0.1% (1000 ppm) by weight) is present within the Project Area. • White wall paint on Concrete block walls throughout the study area. Low-level lead paint (lead concentration less than or equal to 0.1% (1000 mg/Kg) by weight) is present within the Project Area. • Blue wall paint on concrete block walls throughout the study area. Lead in the solder on the sweated-on joints between copper pipe fittings. Lead may also be present in the solder on the seals of bell joints of cast iron drainpipe and glazing on ceramic tiles.	The Ministry of Labour, Immigration, Training and Skills Development *Guideline – Lead on Construction Projects*, dated April 2011, provides guidance in the measures and procedures that should be followed when handling lead-containing materials during construction projects. In addition, the Environmental Abatement Council of Canada - *EACC Lead Abatement Guidelines*, *October 2014*, also provides guidance and recommended work practices. If lead-containing paint applications and surface coatings are not removed prior to the handling, disturbance, or removal of the substrate materials, then the contractor must: • Remove/scrap flaking paint to the best extent possible • Encapsulate other surfaces in good condition For building materials that are to be disposed at a landfill, all lead-based paints and associated substrate (concrete, plaster, wood, etc.) must undergo Toxicity Characteristic Leachate Properties (TCLP) testing to determine disposal procedures. The disposal of lead-containing paint is regulated under the Federal Transportation of Dangerous Goods Act and by the Ministry of the Environment, Conservation and Parks (MECP).
Mercury	Mercury may be present in fluorescent bulbs.	The presence of mercury within assembled units (e.g., fluorescent light tubes and bulbs) should not be considered a hazard provided that the assembled units remain sealed and intact. However, direct skin contact with mercury and inhalation of mercury vapour should be avoided. The fluorescent light tubes and bulbs should be sent for recovery and recycling of mercury. Prior to any demolition activities, the fluorescent lights that may have been disturbed must be handled and if necessary, disposed of in accordance with O. Reg. 490/09.
Polychlorinated Biphenyls (PCBs)		Light ballasts, such as those associated with the type of fluorescent lights (T8s) observed, are usually an electronic-type which do not contain PCBs. However, this would be confirmed by an electrician at the time of dismantling of the lights, if required. All transformers observed were noted to be of the air-cooled variety and as such, would not contain PCBs.

Designated Substance / Hazardous Material	Material Description	Recommended Action/Removal Measures
Silica	Building components containing silica such as in concrete, concrete block, mortar, brick, drywall and drywall tapping joint compound, ceramic tiles and grout/mortar bed.	Any work that involves disturbing materials potentially containing silica must be conducted in accordance with the requirements of Ontario Regulation 490/09 and the recommendations outlined in the Ministry of Labour, Immigration, Training and Skills Development's 'Guideline - Silica on Construction Projects' (April 2011).
Halocarbon-Containing Equipment:	No equipment was observed.	

1.2 General Requirements

.1 Comply with Federal, Provincial, and local requirements, regulations and guidelines pertaining to identified materials. The requirements as set out in these specifications may, at times, exceed the procedures detailed in the various applicable regulations. All work shall be done in compliance with the specifications, AND the regulations/guidelines. Should there be any discrepancy or conflict between the specifications and the regulation/guidelines, the most stringent shall apply.

.2 Replacement of the removed materials is not part of this contract unless otherwise noted.

.3 Coordinate all work with the General Contractor and sub trades as required.

.4 Refer to Architectural Drawings and project specifications for additional details.

.5 Where required, mechanical, electrical, communication and life systems isolations and disconnects will be performed by the General Contractor’s sub trades prior to commencement of remedial work.

.6 The Abatement Contractor is responsible for making all arrangements, and for paying for the disposal of all waste materials in accordance with Federal, Provincial, and local requirements, regulations and guidelines.

.7 The Abatement Contractor is advised that extended hours of work may be required to meet the schedules as detailed in the Scope of Work and shall allow for the cost thereof including shift premiums and overtime. The Owner’s Representative shall be advised in writing at least four days in advance of the proposed working hours.

.8 The Abatement Contractor shall furnish and post on site the name and current phone number of an authorized representative(s) who can be contacted on a 24-hour basis in case of an emergency.

.9 All precautions shall be taken to control the release of asbestos fibres within the work areas, preventing the release of asbestos fibres outside the work areas, to protect all parties including Demolition/Abatement Contractor’s personnel, Owner’s Representative, Owner’s personnel and the public from asbestos dust exposure during the course of the work. The Contract Documents prescribe required asbestos containment provisions, but are not limited to, complying with all Regulations. Failure to meet any of these conditions will be considered a fundamental breach of the contractual obligations.

.10 If the Abatement Contractor fails to comply with requirements dealing with the control of asbestos fibres and the health and safety of Abatement Contractor's employees, Owner's Representative, Owner personnel or the Public; the Owner, or the Owner's Representative, may verbally instruct the Abatement Contractor to cease work immediately with written confirmation to follow within two working days. If the Owner's Representative gives a written statement to the Owner and the Abatement Contractor that sufficient cause exists, the Owner may notify the Abatement Contractor in writing that they are in default of their contractual obligations.

.11 The Owner's Representative shall have the authority to immediately stop the Work through a written instruction if, in their opinion, the Work does not conform to the requirements of the Contract Documents, or if continuance of the Work could subject the Owner, his employees or the public to a hazardous condition. The Work shall not recommence until such time as the deficiency or hazardous situation has been corrected and a written notice to proceed has been issued by the Owner's Representative.

.12 The Owner's Representative will visit the site at his/her discretion to familiarize themselves with the progress and quality of the Work and to determine if the Work is proceeding in accordance with the Contract Documents.

.13 Any employee shall be replaced, at the written request of the Owner's Representative, if working, or causing others to work, in violation of O.Reg. 278/05.

.14 Provide a Certificate signed by the insurance agency naming the Owner, and Owner's representative as additional-insureds.

.15 The Demolition/Abatement Contractor's insurance coverage limits, per occurrence, shall equal or exceed the following:

.1 General Liability $5 million;

.2 Automotive Liability $2 million;

.3 Pollution Liability $5 million including asbestos operations.

.16 The Abatement Contractor must provide thirty (30) days' notice of cancellation or amendment of coverage.

.17 The Abatement Contractor's supervisor must have proven experience and proficiency in the type of Work being undertaken under this Contract.

.18 The Abatement Contractor's supervisor shall be replaced, at the written request of the Owner's Representative, if found to be incompetent or inattentive to the needs of the project.

.19 Where standards of performance are specified or implied and the Work does not comply with the performance specified or implied, such deficiencies shall be corrected as directed by the Owner's Representative. Any subsequent testing shall be done at the Asbestos Contractor's expense.

END OF SECTION

Designated Substances and Hazardous Materials Summary

Section 02 81 00 – Hazardous Materials

Section 02 82 00.01 – Asbestos Abatement - Type 1 Precautions

Section 02 82 00.02 – Asbestos Abatement - Type 2 Precautions

Section 02 82 00.03 – Asbestos Abatement - Type 3 Precautions

Part 1 General

1.1 Related Requirements

.1 Section 02 82 00.01 – Asbestos Abatement – Type 1 Precautions.

.2 Section 02 82 00.02 – Asbestos Abatement – Type 2 Precautions.

1.2 References:

.1 A Guide to the Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations released in November 2007, http://www.labour.gov.on.ca/english/hs/asbestos/index.html.

.2 Arcadis report titled "*Designated Substances and Hazardous Materials Survey – Pre-Renovation, École élémentaire Antonine-Maillet, 615 Ridgeway Avenue, Oshawa, Ontario",* February 26, 2026.

.3 Canadian General Standards Board (CGSB)

.1 CAN/CGSB-1.205-2003, Sealer for Application to Asbestos-Fibre-Releasing Materials.

.4 Canadian Standards Association (CSA International).

.1 CAN/CSA Z94.4.1:21, Performance of filtering respirators.

.2 CAN/CSA Z94.4-18(R2023), Selection, use and care of respirators.

.5 Department of Justice Canada

.1 Canadian Environmental Protection Act (CEPA), 1999.

.2 SOR/2018-196 Prohibition of Asbestos and Products Containing Asbestos Regulations.

.6 Environmental Abatement Council of Canada (EACC) – Lead Abatement Guideline, 2015.

.7 Health Canada/Workplace Hazardous Materials Information System (WHMIS)

.1 Safety Data Sheets (SDS).

.8 Province of Ontario

.1 Ontario Regulation 213/91, Construction Projects.

.2 Ontario Regulation 278/05, Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations.

.3 Ontario Regulation 347/90, General – Waste Management.

.4 Ontario Regulation 490/09, Designated Substances.

.5 Ontario Regulation 632/05, Confined Spaces.

.6 Ontario Regulation 833/90 (as amended) – "Control of Exposure to Biological or Chemical Agents" (O. Reg. 833/90).

.7 Ontario Regulation 860/90, Workplace Hazardous Materials Information System (WHMIS).

.8 Ontario Ministry of Labour, Immigration, Training and Skills Development publication

Guideline – Lead on Construction Projects (Issued September 2004, Updated April 2011).

.9 Ontario Ministry of Labour, Immigration, Training and Skills Development publication *Guideline – Sil*ica Construction Projects (Issued September 2004, Updated April 2011).

.10 Ontario Occupational Health and Safety Act, R.S.O. 1990, c. O.1

.11 Ontario Ministry of the Environment, Conservation and Parks

.1 Ontario Environmental Protection Act, R.S.O. 1990, c. E.19

.12 Transport Canada (TC)

.1 Transportation of Dangerous Goods Act, 1992 (TDGA).

.2 Transportation of Dangerous Goods Regulations (T-19.01-SOR/2001-286)

.13 Underwriters' Laboratories of Canada (ULC).

.14 U.S. Environmental Protection Agency (EPA).

.15 U.S. Department of Health and Human Services/Centers for Disease Control and Prevention (CDC)/National Institute for Occupational Safety and Health (NIOSH)

.1 NIOSH 94-113-August 1994, NIOSH Manual of Analytical Methods (NMAM), 4th Edition.

1.3 Definitions:

.1 Dangerous Goods: product, substance, or organism specifically listed or meets hazard criteria established in Transportation of Dangerous Goods Regulations.

.2 Hazardous Material: product, substance, or organism used for its original purpose; and is either dangerous goods or material that will cause adverse impact to environment or adversely affect health of persons, animals, or plant life when released into the environment.

.3 Hazardous Waste: hazardous material no longer used for its original purpose and that is intended for recycling, treatment, or disposal.

.4 Mercury: Mercury has been used in electrical equipment such as alkaline batteries, fluorescent light bulbs (lamps), high intensity discharge (HID) lights (mercury vapour, high pressure sodium and metal halide), “silent switches” and in instruments such as thermometers, manometers and barometers, pressure gauges, float and level switches and flow meters. Mercury-containing lamps, the bulk of which are 1.22 m (four foot) fluorescent lamps contain between 7 and 40 mg of mercury each. Mercury compounds have also been used historically as additives in latex paint to protect the paint from mildew and bacteria during production and storage.

.5 Owner: The entity that holds legal responsibility for the project, typically the client, property owner, or organization commissioning the work. The Owner has contractual authority over the project and makes key decisions regarding scope, budget, and compliance.

.6 Owner’s Representative: A person or organization designated by the Owner to act on their behalf in overseeing the project.

.7 Ozone Depleting Substances (ODS): Ozone depleting substances and other Halocarbons, which include, for example, refrigerants used in refrigeration equipment and chillers.

.8 Polychlorinated Biphenyls (PCBs): primary source of equipment potentially containing PCBs is fluorescent and H.I.D. light ballasts. Small transformers may also be present. In larger industrial facilities, larger transformers and switch gear containing, or potentially containing, PCBs may also be present. PCBs were also commonly added to industrial paints from the 1940s to the late 1970s. PCBs were added directly to the paint mixture to act as a fungicide, to increase durability and flexibility, to improve resistance to fires and to increase moisture resistance.

.9 WHMIS: Workplace Hazardous Materials Information System

1.4 Action and Informational Submittals

.1 Quality Control:

.1 Provide proof satisfactory to Owner's Representative that employees have had instruction on hazards of WHMIS, lead exposure, asbestos exposure, respirator use, fit testing, PPE use (including Tyvek dress), and aspects of work procedures and protective measures.

.2 Product Data:

.1 Submit manufacturer's instructions, printed product literature and data sheets for hazardous materials and include product characteristics, performance criteria, physical size, finish, and limitations.

.2 Submit one copy of WHMIS SDS in accordance to the Owner's Representative for each hazardous material required prior to bringing hazardous material on site.

1.5 Existing Conditions

.1 The Arcadis report titled "*Designated Substances and Hazardous Materials Survey – Pre-Renovation, École élémentaire Antonine-Maillet, 615 Ridgeway Avenue, Oshawa, Ontario",* February 26, 2026, indicates the locations of hazardous materials present. Areas requiring special handling under hazardous material precautions are outlined in this Specification package. Asbestos-containing and lead-containing materials identified in the above-referenced report include:

.1 Thermal insulation applied to pipe fittings and pipe straight containing 55% Chrysotile in Rooms 101, 102 and 102A.

.2 (12"x12") Vinyl floor tile – beige with dark brown and white directional flecks containing 7.4% Chrysotile in Room 101.

.3 (9"x9") Vinyl floor tile – Green and associated mastic containing 13.2% Chrysotile and 2% Chrysotile in Room 101A.

.4 (9"x9") Vinyl floor tile - beige and associated mastic containing 5% Chrysotile and 2% Chrysotile in Rooms 202 and 203.

.5 Vinyl sheet flooring and associated paper backing mastic containing 9% Chrysotile and 28.6% Chrysotile in Corridor C102.

.6 (2'x2') Cement board wall panels containing 28% Chrysotile in Corridors C101 and C102 and Room 202.

.7 Solid cement board wall panels containing 23% Chrysotile in Room 202.

.8 Gypsum board with asbestos-containing joint taping compound containing 2.8% Chrysotile applied to walls in Rooms 103, 104, 201, A1 and A2 and to ceilings in Room 101A.

.9 Concrete block-filler paint applied to walls containing 1% Chrysotile throughout the 1961 construction era.

.10 Reinforced autoclaved aerated concrete "Siporex" joint caulking containing 2% Chrysotile in Rooms A1, A2, 201, 202 and 203.

.11 White paint on concrete block walls containing lead greater than or equal to 0.1% (1000 ppm) is present within the study area.

.12 Blue paint on concrete block walls containing lead less than or equal to 0.1% (1000 ppm) is present within the study area.

.13 Lead may also be present in the solder on the seals of bell joints of any cast iron drainpipe, in the solder of on the sweated-on joints between copper pipe and fittings and glazing on ceramic tiles.

.2 Silica-containing materials should be handled in accordance with the measures and procedures outlined the Ontario Ministry of Labour, Immigration, Training and Skills Development Guideline, Silica on Construction Projects, April 2011, should be followed.

.3 Prior to undertaking demolition activities that involve fluorescent lights, ensure that a licensed electrician inspects ballasts to determine whether or not any light ballasts may contain PCBs. Guidance in identification of PCB ballasts is provided in the Environment Canada publication titled "Identification of Lamp Ballasts Containing PCBs. Report EPS 2/CC/2 (revised)", August 1991.

.4 Fluorescent light tubes and bulbs should be recycled for mercury.

.5 All ODS-containing equipment should be removed prior to demolition in the following manner:

.1 Any equipment designated for disposal as scrap must be drained of its contents by a certified person and equipped with a label indicating that the equipment no longer contains any refrigerant. The specific requirements for information on the label, as specified in the regulation 2022:SOR/2022-110, must be adhered to;

.2 Equipment designated for relocation to another facility held by the owner must be drained and labelled as above; and

.3 Any equipment that is drained to facilitate relocation to another facility held by the owner must be tested for leaks prior to re-filling. The equipment must be re-filled within six months of the leak test.

.6 Workers involved in the demolition of any mould-impacted materials encountered during any renovation or demolition activities should wear appropriate protective clothing and equipment and follow decontamination practices as outlined in the Canadian Construction Association Standard Construction Document CCA-82 2018 – Mould Guidelines for the Canadian Construction Industry, and the Mould Abatement Guidelines. Environmental Abatement Council of Canada. Edition 3. 2015.

1.6 Delivery, Storage and Handling

.1 Deliver, store and handle materials in accordance with manufacturer's written instructions.

.2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.

.3 Transport hazardous materials and wastes in accordance with Transportation of Dangerous Goods Act, Transportation of Dangerous Goods Regulations, and applicable provincial regulations.

.4 Storage and Handling Requirements:

.1 Co-ordinate storage of hazardous materials with Owner’s Representative and abide by internal requirements for labelling and storage of materials and wastes.

.2 Store and handle hazardous materials and wastes in accordance with applicable federal and provincial laws, regulations, codes, and guidelines.

.3 Store and handle flammable and combustible materials in accordance with National Fire Code of Canada requirements.

.4 Keep no more than 45 litres of flammable and combustible liquids such as gasoline, kerosene, and naphtha for ready use.

.1 Store flammable and combustible liquids in approved safety cans bearing the Underwriters' Laboratory of Canada or Factory Mutual seal of approval.

.2 Storage of quantities of flammable and combustible liquids exceeding 45 litres for work purposes requires the written approval of the Owner’s Representative.

.5 Transfer of flammable and combustible liquids is prohibited within buildings.

.6 Transfer flammable and combustible liquids away from open flames or heat-producing devices.

.7 Solvents or cleaning agents must be non-flammable or have flash point above 38 degrees C.

.8 Store flammable and combustible waste liquids for disposal in approved containers located in safe, ventilated area. Keep quantities to minimum.

.9 Observe smoking regulations, smoking is prohibited in areas where hazardous materials are stored, used, or handled.

.10 Storage requirements for quantities of hazardous materials and wastes in excess of 5 kg for solids, and 5 litres for liquids:

.1 Store hazardous materials and wastes in closed and sealed containers.

.2 Label containers of hazardous materials and wastes in accordance with WHMIS.

.3 Store hazardous materials and wastes in containers compatible with that material or waste.

.4 Segregate incompatible materials and wastes.

.5 Ensure that different hazardous materials or hazardous wastes are stored in separate containers.

.6 Store hazardous materials and wastes in secure storage area with controlled access.

.7 Maintain clear egress from storage area.

.8 Store hazardous materials and wastes in location that will prevent them from spilling into environment.

.9 Have appropriate emergency spill response equipment available near storage area, including personal protective equipment.

.10 Maintain inventory of hazardous materials and wastes, including product name, quantity, and date when storage began.

.11 When hazardous waste is generated on site:

.1 Co-ordinate transportation and disposal with the Owner's Representative.

.2 Comply with applicable federal, provincial, and municipal laws and regulations for generators of hazardous waste.

.3 Use licensed carrier authorized by provincial authorities to accept subject material.

.4 Before shipping material obtain written notice from intended hazardous waste treatment or disposal facility it will accept material and it is licensed to accept this material.

.5 Label containers with legible, visible safety marks as prescribed by federal and provincial regulations.

.6 Only trained personnel handle, offer for transport, or transport dangerous goods.

.7 Provide copy of shipping documents and waste manifests to Owner's Representative.

.8 Track receipt of completed manifests or Bills of Lading describing and listing waste created and final disposal locations from consignee after shipping dangerous goods, to the Owner's Representative.

.9 Report discharge, emission, or escape of hazardous materials immediately to the Owner's Representative and appropriate provincial authority. Take reasonable measures to control release.

.11 Ensure personnel have been trained in accordance with Workplace Hazardous Materials Information System (WHMIS) requirements.

.12 Report spills or accidents immediately to the Owner's Representative. Submit a written spill report to the Owner's Representative within 24 hours of incident.

Part 2 Products

2.1 Materials

.1 Description:

.1 Bring on site only quantities hazardous material required to perform Work.

.2 Maintain SDS in proximity to where materials are being used. Communicate this location to personnel who may have contact with hazardous materials.

Part 3 Execution

3.1 Cleaning

.1 Progress Cleaning:

.1 Leave Work area clean at end of each day.

.2 Final Cleaning: upon completion remove surplus materials, rubbish, tools, and equipment.

.3 Waste Management: separate waste materials for reuse and recycling.

.1 Dispose hazardous waste materials in accordance with applicable federal and provincial acts, regulations, and guidelines.

.2 Recycle hazardous wastes for which there is approved, cost effective recycling process available.

.3 Send hazardous wastes to authorized hazardous waste disposal or treatment facilities.

.4 Burning, diluting, or mixing hazardous wastes for purpose of disposal is prohibited.

.5 Disposal of hazardous materials in waterways, storm, or sanitary sewers, or in municipal solid waste landfills is prohibited.

.6 Dispose hazardous wastes in timely fashion in accordance with applicable provincial regulations.

.7 Minimize generation of hazardous waste to maximum extent practicable. Take necessary precautions to avoid mixing clean and contaminated wastes.

.8 Identify and evaluate recycling and reclamation options as alternatives to land disposal, such as:

.1 Hazardous wastes recycled in manner constituting disposal.

.2 Hazardous waste burned for energy recovery.

.3 Lead-acid battery recycling.

.4 Hazardous wastes with economically recoverable precious metals.

END OF SECTION

Part 1 General

1.1 Summary

.1 **All work shall be done in compliance with Ontario Regulation 278/05 – *Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations* – made under the Occupational Health and Safety Act.** Should there be any discrepancy or conflict between the documents, the most stringent shall apply.

.2 Comply with requirements of this Section when performing the following work when wetted and using non-powered, hand-held tools only:

.1 Remove and dispose as asbestos waste, all (12”x12”) vinyl floor tile – beige with dark brown and white directional flecks in Room 101.

.2 Remove and dispose as asbestos waste, the first row (4 tiles) of (9”x9”) vinyl floor tile – green in Room 101A.

.3 Remove and dispose as asbestos waste, all solid cement board panels applied to millwork and wall in Room 202.

1.2 Related Requirements

.1 Section 02 80 00 – Hazardous Materials

.2 Section 02 82 00.02 – Asbestos Abatement – Type 2 Precautions.

1.3 References

.1 A Guide to the Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations released in November 2007, http://www.labour.gov.on.ca/english/hs/asbestos/index.html.

.2 Arcadis report titled “Designated Substances and Hazardous Materials Survey – Pre-Renovation, École élémentaire Antonine-Maillet, 615 Ridgeway Avenue, Oshawa, Ontario”, February 26, 2026.

.3 Canadian General Standards Board (CGSB)

.1 CAN/CGSB-1.205-2003, Sealer for Application to Asbestos-Fibre-Releasing Materials.

.4 Canadian Standards Association (CSA International).

.1 CAN/CSA Z94.4.1:21, Performance of filtering respirators.

.2 CAN/CSA Z94.4-18(R2003), Selection, use, and care of respirators

.3 CAN/CSA Z317.13-22 Infection control during construction, renovation, and maintenance of health care facilities

.5 Department of Justice Canada

.1 Canadian Environmental Protection Act (CEPA), 1999.

.2 SOR/2018-196 Prohibition of Asbestos and Products Containing Asbestos Regulations.

.6 Environmental Abatement Council of Canada (EACC) – Lead Abatement Guideline, 2015.

.7 Health Canada/Workplace Hazardous Materials Information System (WHMIS)

.1 Safety Data Sheets (SDS).

.8 Province of Ontario

.1 Ontario Regulation 213/91, Construction Projects.

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.3 Ontario Regulation 347/90, General – Waste Management.

.4 Ontario Regulation 490/09, Designated Substances.

.5 Ontario Regulation 632/05, Confined Spaces.

.6 Ontario Regulation 833/90 (as amended) – "Control of Exposure to Biological or Chemical Agents" (O. Reg. 833/90).

.7 Ontario Regulation 860/90, Workplace Hazardous Materials Information System (WHMIS).

.8 Ontario Ministry of Labour, Immigration, Training and Skills Development publication *Guideline – Lead on Construction Projects* (Issued September 2004, Updated April 2011).

.9 Ontario Ministry of Labour, Immigration, Training and Skills Development publication *Guideline – Sil*ica Construction Projects (Issued September 2004, Updated April 2011).

.10 Ontario Occupational Health and Safety Act, R.S.O. 1990, c. O.1

.11 Ontario Ministry of the Environment, Conservation and Parks

.1 Ontario Environmental Protection Act, R.S.O. 1990, c. E.19

.9 Transport Canada (TC)

.1 Transportation of Dangerous Goods Act, 1992 (TDGA).

.2 Transportation of Dangerous Goods Regulations (T-19.01-SOR/2001-286)

.10 Underwriters' Laboratories of Canada (ULC).

.11 U.S. Environmental Protection Agency (EPA).

.12 U.S. Department of Health and Human Services/Centers for Disease Control and Prevention (CDC)/National Institute for Occupational Safety and Health (NIOSH)

.1 NIOSH 94-113-August 1994, NIOSH Manual of Analytical Methods (NMAM), 4th Edition.

1.4 Definitions

.1 Amended Water: water with non-ionic surfactant wetting agent added to reduce water tension to allow wetting of fibres.

.2 Asbestos-Waste Containers: containers for dust and waste shall be dust tight, suitable for the type of waste, impervious to asbestos, identified as asbestos waste and cleaned with a damp cloth or High Efficiency Particulate Air (HEPA) filtered vacuum prior to being removed from the work areas.

.1 Waste shall be placed inside two separate containers.

.1 Inner container: 0.15 mm (6 mil) thick sealable polyethylene waste bag.

.2 Outer container: sealable metal or fibre type where there are sharp objects included in the waste material; otherwise, outer container may be a sealable metal or fibre type or a second 0.15 mm (6 mil) thick sealable polyethylene bag.

.3 Labelling requirements: Affix a pre-printed cautionary asbestos warning in both official languages that is clearly visible when ready for removal to disposal site.

.4 Asbestos Waste Containers shall be removed from work areas at regular intervals.

.3 Asbestos-Containing Materials (ACMs): materials that contain 0.5 per cent or more asbestos by dry weight and are identified under Existing Conditions including fallen materials and settled dust.

.4 Authorized Visitors: Engineers, Consultants or designated representatives, and representatives of regulatory agencies, third party consultant and Owner's Representatives.

.5 Competent Person: in relation to specific work and regulatory/guideline requirements, means a worker who:

.1 Is qualified because of knowledge, training, and experience to perform the work.

.2 Is familiar with the provincial and federal laws and with the provisions of the regulations that apply to the work.

.3 Has knowledge of all potential or actual danger to health or safety in the work.

.6 Confined Space:

.1 A fully or partially enclosed space,

.1 That is not both designed and constructed for continuous human occupancy, and

.2 In which atmospheric hazards may occur because of its construction, location or contents or because of work that is done in it.

.7 Friable material: material that when dry can be crumbled, pulverized, or powdered by hand pressure and includes such material that is crumbled, pulverized, or powdered.

.8 HEPA Vacuum: High Efficiency Particulate Air (HEPA) filtered vacuum equipment with a filter system capable of collecting and retaining fibres greater than 0.3 microns in any direction at 99.97% efficiency.

.9 Integrity Test: testing method used to determine integrity of Negative Pressure unit/vacuum HEPA-filter leak test.

.10 Landfill: Ministry of the Environment, Conservation and Parks (MECP) licensed landfill

.11 Non-Friable Material: material that when dry cannot be crumbled, pulverized, or powdered by hand pressure.

.12 Occupied Area: any area of building or work site that is outside work area.

.13 Owner: The entity that holds legal responsibility for the project, typically the client, property owner, or organization commissioning the work. The Owner has contractual authority over the project and makes key decisions regarding scope, budget, and compliance.

.14 Owner's Representative: A person or organization designated by the Owner to act on their behalf in overseeing the project.

.15 Polyethylene: polyethylene sheeting or rip-proof polyethylene sheeting with tape along edges, around penetrating objects, over cuts and tears, and elsewhere as required to provide protection and isolation.

.16 Wetting Agent: 50% polyoxyethylene ester and 50% polyoxyethylene ether mixed with water in concentration to provide thorough wetting of asbestos containing material.

.17 Sealer: flame spread, and smoke developed rating less than 50.

.18 Slow - drying sealer: non-staining, clear, water - dispersible type that remains tacky on surface for at least 8 hours and designed for purpose of trapping residual asbestos fibres.

.19 Sprayer: garden reservoir type sprayer or airless spray equipment capable of producing mist or fine spray. Must have appropriate capacity for scope of work.

.20 Tape: tape suitable for sealing polyethylene to surfaces under both dry and wet conditions using amended water.

.21 Work Area: area where work takes place which will, or may, disturb ACMs.

1.5 Action and Informational Submittals

.1 Before beginning work:

.1 Submit proof satisfactory to the Owner's Representative that all asbestos workers have received appropriate training and education by a competent person on hazards of asbestos exposure, good personal hygiene, entry and exit from work area, aspects of work procedures and protective measures while working in work areas, and the use, cleaning and disposal of respirators and protective clothing. Submit copies of all training certificates indicating that:

.1 *every supervisor of a worker involved in a has successfully completed the Asbestos Abatement Supervisor Training Program approved by the Ministry of Training, Colleges, and Universities. O.Reg. 278/05, s. 20(1)*.

.2 Ensure supervisory personnel have attended asbestos abatement course, of not less than two days duration, approved by the Owner's Representative. Submit proof of attendance in form of certificate. Minimum of one Supervisor for every ten workers**.** Supervisor must remain on site at all times asbestos removal or cleanup is occurring.

.3 Submit proof satisfactory to the Owner's Representative that employees have respirator fitting and testing in accordance with CAN/CSA Z94.4. Workers must be fit tested (irritant smoke test) with respirator that is personally issued.

.4 Submit provincial and/or local requirements for Notice of Project form.

.5 Submit Workplace Safety and Insurance Board status and transcription of insurance.

.6 Submit proof satisfactory to the Owner's Representative that suitable arrangements have been made to dispose of asbestos containing waste in accordance with requirements of authority having jurisdiction.

.7 Submit to Owner's Representative necessary permits for transportation and disposal of asbestos-containing waste and proof that asbestos-containing waste has been received and properly disposed within 24 hours of leaving Owner's property.

.8 Submit documentation including test results, fire and flammability data, and Safety Data Sheets (SDS) for chemicals or materials.

.2 Submittals upon completion of work:

.1 Asbestos waste haulage and disposal documentations including Bills of Lading, waste

transfer documents and disposal receipts within 24 hours of removal from Owner's property.

.2 All documentation as specified in the contract General Conditions including, but not limited to, Workplace Safety and Insurance Board Certificate, Statutory Declarations and Proof of Publication of Substantial Performance.

1.6 Quality Assurance

.1 Regulatory Requirements: comply with federal, provincial, and local requirements pertaining to asbestos, provided that in case of conflict among these requirements or with these specifications, more stringent requirement applies. Comply with regulations in effect at time Work is performed.

.2 Health and Safety:

.1 Safety Requirements: worker protection.

.1 Protective equipment and clothing to be worn by workers while in work area include:

.1 Air purifying half-mask respirator with N-100, R-100, or P-100 particulate filter, personally issued to worker and marked as to efficiency and purpose, suitable for protection against asbestos and acceptable to Provincial Authority having jurisdiction. The respirator to be fitted so that there is an effective seal between the respirator and the worker's face, unless the respirator is equipped with a hood or helmet. The respirator to be cleaned, disinfected, and inspected after use on each shift, or more often, if necessary, when issued for the exclusive use of one worker, or after each use when used by more than one worker. The respirator to have damaged or deteriorated parts replaced prior to being used by a worker; and, when not in use, to be stored in a convenient, clean and sanitary location. The employer to establish written procedures regarding the selection, use and care of respirators, and a copy of the procedures to be provided to and reviewed with each worker who is required to wear a respirator. A worker not to be assign physically able to perform the operation while using the respirator.

.2 Disposable-type protective clothing that does not readily retain or permit penetration of asbestos fibres. Protective clothing to be provided by the employer and worn by every worker who enters the work area, and the protective clothing shall consist of a head covering and full body covering that fits snugly at the ankles, wrists and neck, in order to prevent asbestos fibres from reaching the garments and skin under the protective clothing to include suitable footwear, and to be repaired or replaced if torn.

.2 Before leaving work area, the worker must decontaminate his or her protective clothing by using a vacuum equipped with a HEPA filter, or by damp wiping, before removing the protective clothing, or, if the protective clothing will not be reused, place it in a container for dust and waste. The container to be dust tight, suitable for asbestos waste, impervious to asbestos, identified as asbestos waste, cleaned with a damp cloth or a vacuum equipped with a HEPA filter immediately before removal from the work area, and removed from the work area frequently and at regular intervals.

.3 Ensure workers wash hands and face when leaving work area. Facilities for washing are to be in close proximity to the work area.

.4 Eating, drinking, chewing, and smoking are not permitted in work area.

.5 Provide and post in Clean Change Room and in Equipment and Access Room the procedures described in this section, in both official languages.

.6 Ensure that no person required to enter a work area has facial hair that affects seal between respirator and face.

.7 Visitor Protection:

.1 Provide protective clothing and approved respirators to Authorized Visitors to work areas.

.2 Instruct Authorized Visitors in the use of protective clothing, respirators, and procedures.

.3 Instruct Authorized Visitors in proper procedures to be followed in entering into and exiting from work area.

1.7 Waste Management and Disposal

.1 Separate waste materials for reuse and recycling and place in designated containers.

.2 Collect and separate for disposal paper, plastic, polystyrene, corrugated cardboard, packaging material in appropriate on-site bins for recycling.

.3 Remove from site and dispose of packaging materials at appropriate recycling facilities.

.4 Place materials defined as hazardous or toxic in designated containers.

.5 Handle and dispose of hazardous materials in accordance with the CEPA, TDGA, federal, provincial, and municipal regulations.

.6 Disposal of asbestos waste generated by removal activities must comply with federal, provincial, and municipal regulations. Dispose asbestos waste in sealed double thickness 0.152 mm thick (6 mil) bags or leak proof drums. Label containers with appropriate warning labels.

.7 Provide Bills of Lading to the Owner's Representative describing and listing waste created and final disposal location. Transport containers by approved means to licensed landfill for burial.

.8 Submit to Owner's Representative proof that asbestos-containing waste has been received and properly disposed within 24 hours of leaving Owner's property.

1.8 Existing Conditions

.1 Arcadis report titled "*Designated Substances and Hazardous Materials Survey – Pre-Renovation, École élémentaire Antonine-Maillet, 615 Ridgeway Avenue, Oshawa, Ontario",* February 26, 2026, indicates the locations of hazardous materials present. Areas requiring special handling under hazardous material precautions are outlined in this Specification package. Asbestos-containing materials identified in the above-referenced report and covered in applicable sections of this specification package include:

.1 Thermal insulation applied to pipe fittings and pipe straight containing 55% Chrysotile in Rooms 101, 102 and 102A.

.2 (12”x12”) Vinyl floor tile – beige with dark brown and white directional flecks containing 7.4% Chrysotile in Room 101.

.3 (9”x9”) Vinyl floor tile – Green and associated mastic containing 13.2% Chrysotile and 2% Chrysotile in Room 101A.

.4 (9”x9”) Vinyl floor tile - beige and associated mastic containing 5% Chrysotile and 2% Chrysotile in Rooms 202 and 203.

.5 Vinyl sheet flooring and associated paper backing mastic containing 9% Chrysotile and 28.6% Chrysotile in Corridor C102.

.6 (2’x2’) Cement board wall panels containing 28% Chrysotile in Corridors C101 and C102 and Room 202.

.7 Solid cement board wall panels containing 23% Chrysotile in Room 202.

.8 Gypsum board with asbestos-containing joint taping compound containing 2.8% Chrysotile applied to walls in Rooms 103, 104, 201, A1 and A2 and to ceilings in Room 101A.

.9 Concrete block-filler paint applied to walls containing 1% Chrysotile throughout the 1961 construction era.

.10 Reinforced autoclaved aerated concrete “Siporex” joint caulking containing 2% Chrysotile in Rooms A1, A2, 201, 202 and 203.

.2 Notify the Owner’s Representative of suspect asbestos-containing material discovered during Work and not apparent from drawings, specifications, or report pertaining to Work. Do not disturb such material until instructed by Owner’s Representative.

1.9 Scheduling

.1 Hours of Work: perform work during normal working hours (8:00 to 16:00) according to Owner’s instructions. Hourly rates are to be provided should after hours work be required. Work beyond the normal working hours may be authorized if the contractor submits the request in writing.

.2 Provide a bar chart indicating planned progress for critical activities as required under Scope of Work as well as additional information listed below a minimum of 48 hours prior to commencement of any preparatory work indicating:

.1 shifts to be worked;

.2 proposed workforce;

.3 starting date;

.4 estimated date of commencement of asbestos removal;

.5 estimated date of completion of asbestos removal;

.6 estimated completion date.

1.10 Personnel Training

.1 Submit proof satisfactory to the Owner’s Representative that all asbestos workers and/or supervisor have received appropriate training and education by a competent person in the hazards of asbestos exposure, good personal hygiene and work practices while working in work

areas, and the use, cleaning and disposal of respirators and protective clothing.

.2 Submit proof satisfactory to the Owner's Representative that employees have respirator fitting and testing. Workers must be fit tested (irritant smoke test) with respirator that is personally issued in accordance with CAN/CSA Z94.4.

.3 Instruction and training related to respirators includes, at minimum:

.1 Proper fitting of equipment.

.2 Inspection and maintenance of equipment.

.3 Disinfecting of equipment.

.4 Limitations of equipment.

.4 Submit proof that supervisory personnel have attended asbestos abatement course, of not less than two days duration, approved by the Owner's Representative. Minimum of one supervisor for every ten workers.

Part 2 Products

2.1 Materials

.1 Asbestos Waste Containers: contain waste in two separate containers.

.1 Inner container: 0.15 mm (6 mil) thick sealable polyethylene waste bag.

.2 Outer container: sealable metal or fibre type where there are sharp objects included in the waste material; otherwise, outer container may be a sealable metal or fibre type or a second 0.15 mm (6 mil) thick sealable polyethylene bag.

.3 Labelling requirements: Affix a pre-printed cautionary asbestos warning in both official languages that is clearly visible when ready for removal to disposal site.

.2 Drop Sheets:

.1 Polyethylene: 0.15 mm thick.

.2 FR polyethylene: 0.15 mm thick woven fibre reinforced fabric bonded both sides with polyethylene.

.3 Wetting Agent: 50% polyoxyethylene ester and 50% polyoxyethylene ether mixed with water in a concentration to provide thorough wetting of asbestos-containing material.

.4 Slow - drying sealer: non-staining, clear, water - dispersible type that remains tacky on surface for at least 8 hours and designed for purpose of trapping residual asbestos fibres.

.5 Tape: tape suitable for sealing polyethylene to surfaces under both dry and wet conditions using amended water.

Part 3 Execution

3.1 Supervision

.1 Supervisor must meet the requirements of this specification.

.2 Minimum of one Supervisor for every ten workers is required.

.3 Approved Supervisor must remain within work area during disturbance, removal, or other handling of asbestos-containing materials.

3.2 Asbestos Abatement

.1 Do not begin work until Owner's Representative has provided authorization to proceed.

.2 Before beginning Work, isolate work area using, minimum, preprinted cautionary asbestos warning signs in sizing as per O. Reg. 278/05 in both official languages s in upper case 'Helvetica Medium' letters reading as follows, where number in parentheses indicates font size to be used: 'CAUTION ASBESTOS HAZARD AREA (25 mm) / NO UNAUTHORIZED ENTRY (19 mm) / WEAR ASSIGNED PROTECTIVE EQUIPMENT (19 mm) / BREATHING ASBESTOS DUST MAY CAUSE SERIOUS BODILY HARM (7 mm), that are visible at access routes to work area.

.3 Before beginning Work remove visible dust from surfaces in work area where dust is likely to be disturbed during course of work.

.1 Use HEPA vacuum or damp cloths where damp cleaning does not create a hazard and is otherwise appropriate.

.2 Do not use compressed air to clean up or remove dust from any surface.

.4 Prevent spread of dust from work area using measures appropriate to work to be done.

.1 Use FR polyethylene drop sheets over flooring such as carpeting that absorbs dust and over flooring in work area where dust and contamination cannot otherwise be safely contained. Drop sheets are not to be reused.

.5 Separate the work areas using rope barriers, signage and other appropriate methods.

.6 Wear an appropriate respirator approved for use with asbestos and suitable protective equipment. Only persons wearing protective clothing and equipment shall be allowed to enter the work area.

.7 Do not use any power tools. All work is to be completed by non-powered hand tools only.

.8 Remove any loose materials by HEPA vacuum; thoroughly wet material containing asbestos to be removed or disturbed before and during Work unless wetting creates hazard or causes damage.

.1 Use garden reservoir type low - velocity sprayer or airless spray equipment capable of producing mist or fine spray.

.2 Perform Work in a manner to reduce dust creation to lowest levels practicable.

.3 Work is subject to visual inspection.

.4 Contamination of surrounding areas indicated by visual inspection or air monitoring will require complete enclosure and clean-up of affected areas at no cost to the Owner.

3.3 Cleanup

.1 Frequently during Work and immediately after completion of work, clean up dust and asbestos containing waste using HEPA vacuum or by damp mopping.

.2 Place dust and asbestos containing waste in sealed dust tight waste bags. Treat drop sheets and disposable protective clothing as asbestos waste and wet and fold to contain dust and then place in waste bags.

.3 Immediately before their removal from work area and disposal, clean each filled waste bag using damp cloths or HEPA vacuum and place in second clean waste bag.

.4 Seal and remove double bagged waste from site. Dispose in accordance with requirements of Provincial and Federal Authority having jurisdiction. Supervise dumping and ensure that landfill operator is fully aware of hazardous nature of material to be dumped and that guidelines and regulations for asbestos disposal are followed.

.5 Perform final thorough clean-up of work areas and adjacent areas affected by Work using HEPA vacuum.

3.4 Inspection

.1 Prior to the beginning of removal, Owner's Representative will perform a pre-abatement inspection on the work area. The pre-abatement inspection will be completed to ensure all equipment required to complete the measures and procedures that apply to Type 1/low-risk activities are present. Deviation from these requirements that have not been approved in writing by the Owner's Representative and/or Owner may result in work stoppage, at no cost to the Owner.

.2 Following completion of the work, the Owner's Representative must be contacted to complete a final visual inspection. This inspection must be organised by the contractor with a minimum of twenty-four (24) hours notice.

.3 Owner's Representative will inspect work for:

.1 Adherence to specific procedures and materials requirements.

.2 Compliance with specification and governing authority requirements prior to contaminated work; and,

.3 Final cleanliness and completion. Work area will be considered clean when all visible dust and debris is removed from the substrate to which it was adhered and deemed acceptable to the Owner's Representative. No distinction will be made about the content of the dust or debris.

.4 No additional costs will be allowed by Contractor for additional labour or materials required to provide specified performance level.

3.5 Re-Establishment of Objects and Systems

.1 Not Applicable.

END OF SECTION

Part 1 General

1.1 Summary

.1 **All work shall be done in compliance with Ontario Regulation 278/05 – *Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations* – made under the Occupational Health and Safety Act.** Should there be any discrepancy or conflict between the documents, the most stringent shall apply.

.2 Comply with requirements of this Section when performing the following work when wetted and using power tools connected to a dust-collecting device equipped with a HEPA filter where non-powered hand tools cannot be used.

.1 Remove and dispose as clean waste, entire ceiling assemblies in Room 101.

.2 Remove and dispose as asbestos waste, all thermal insulation applied to pipe fittings using glove bags in Rooms 101 and 201. For costing purposes, allow for the removal of thermal insulation from ten (10) pipe fittings.

.3 Remove and dispose as asbestos waste, all (9”x9”) vinyl floor tile – beige and associated mastic in Rooms 202 and 203.

.4 Remove and dispose as asbestos waste, select sections gypsum board with asbestos-containing joint compound applied to walls in Room 201.

.5 Remove and dispose as asbestos waste, all concrete block wall and associated block-filler-paint located between Rooms 201 and 203.

.6 Remove and dispose as asbestos waste, select pockets of concrete block and associated asbestos-containing paint in areas pre-determined by the General Contractor to allow for wall penetration operations.

1.2 Related Requirements

.1 Section 02 80 00 – Hazardous Materials

.2 Section 02 82 00.01 – Asbestos Abatement – Type 1 Precautions.

1.3 References

.1 A Guide to the Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations released in November 2007, http://www.labour.gov.on.ca/english/hs/asbestos/index.html.

.2 Arcadis report titled “Designated Substances and Hazardous Materials Survey – Pre-Renovation, A École élémentaire Antonine-Maillet, 615 Ridgeway Avenue, Oshawa, Ontario”, February 26, 2026.

.3 Canadian General Standards Board (CGSB)

.1 CAN/CGSB-1.205-2003, Sealer for Application to Asbestos-Fibre-Releasing Materials.

.4 Canadian Standards Association (CSA International).

.1 CAN/CSA Z94.4.1:21, Performance of filtering respirators.

.2 CAN/CSA Z94.4-18(R2003), Selection, use, and care of respirators

.3 CAN/CSA Z317.13-22 Infection control during construction, renovation, and maintenance of health care facilities

.5 Department of Justice Canada

.1 Canadian Environmental Protection Act (CEPA), 1999.

.2 SOR/2018-196 Prohibition of Asbestos and Products Containing Asbestos Regulations.

.6 Environmental Abatement Council of Canada (EACC) – Lead Abatement Guideline, 2015.

.7 Health Canada/Workplace Hazardous Materials Information System (WHMIS)

.1 Safety Data Sheets (SDS).

.8 Province of Ontario

.1 Ontario Regulation 213/91, Construction Projects.

.2 Ontario Regulation 278/05, Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations.

.3 Ontario Regulation 347/90, General – Waste Management.

.4 Ontario Regulation 490/09, Designated Substances.

.5 Ontario Regulation 632/05, Confined Spaces.

.6 Ontario Regulation 833/90 (as amended) – “Control of Exposure to Biological or Chemical Agents” (O. Reg. 833/90).

.7 Ontario Regulation 860/90, Workplace Hazardous Materials Information System (WHMIS).

.8 Ontario Ministry of Labour, Immigration, Training and Skills Development publication *Guideline – Lead on Construction Projects* (Issued September 2004, Updated April 2011).

.9 Ontario Ministry of Labour, Immigration, Training and Skills Development publication *Guideline – Sil*ica Construction Projects (Issued September 2004, Updated April 2011).

.10 Ontario Occupational Health and Safety Act, R.S.O. 1990, c. O.1

.11 Ontario Ministry of the Environment, Conservation and Parks

1. Ontario Environmental Protection Act, R.S.O. 1990, c. E.19

.9 Transport Canada (TC)

.1 Transportation of Dangerous Goods Act, 1992 (TDGA).

.2 Transportation of Dangerous Goods Regulations (T-19.01-SOR/2001-286)

.10 Underwriters' Laboratories of Canada (ULC).

.11 U.S. Environmental Protection Agency (EPA).

.12 U.S. Department of Health and Human Services/Centers for Disease Control and Prevention (CDC)/National Institute for Occupational Safety and Health (NIOSH)

.1 NIOSH 94-113-August 1994, NIOSH Manual of Analytical Methods (NMAM), 4th Edition.

1.4 Definitions

.1 Airlock: system for permitting ingress or egress without permitting air movement between contaminated area and uncontaminated area, typically consisting of two curtained doorways at least 2 m apart.

.2 Air clearance: final air monitoring undertaken at the completion of the asbestos abatement operation.

.3 Amended Water: water with non-ionic surfactant wetting agent added to reduce water tension to allow wetting of fibres.

.4 Asbestos-Waste Containers: containers for dust and waste shall be dust tight, suitable for the type of waste, impervious to asbestos, identified as asbestos waste and cleaned with a damp cloth or High Efficiency Particulate Air (HEPA) filtered vacuum prior to being removed from the work areas.

.1 Waste shall be placed inside two separate containers.

.1 Inner container: 0.15 mm (6 mil) thick sealable polyethylene waste bag.

.2 Outer container: sealable metal or fibre type where there are sharp objects included in the waste material; otherwise, outer container may be a sealable metal or fibre type or a second 0.15 mm (6 mil) thick sealable polyethylene bag.

.3 Labelling requirements: Affix a pre-printed cautionary asbestos warning in both official languages that is clearly visible when ready for removal to disposal site.

.4 Asbestos Waste Containers shall be removed from work areas at regular intervals.

.5 Asbestos-Containing Materials (ACMs): materials that contain 0.5 per cent or more asbestos by dry weight and are identified under Existing Conditions including fallen materials and settled dust.

.6 Authorized Visitors: Engineers, Consultants or designated representatives, and representatives of regulatory agencies, third party consultant and Owner's Representatives.

.7 Competent Person: in relation to specific work and regulatory/guideline requirements, means a worker who:

.1 Is qualified because of knowledge, training, and experience to perform the work.

.2 Is familiar with the provincial and federal laws and with the provisions of the regulations that apply to the work.

.3 Has knowledge of all potential or actual danger to health or safety in the work.

.8 Confined Space:

.1 A fully or partially enclosed space,

.1 that is not both designed and constructed for continuous human occupancy, and

.2 in which atmospheric hazards may occur because of its construction, location or contents or because of work that is done in it.

.9 Curtained doorway: arrangement of closures to allow ingress and egress from one room to another while permitting minimal air movement between rooms, typically constructed as follows:

.1 Place two overlapping sheets of polyethylene over existing or temporarily framed doorway, secure each along top of doorway, secure vertical edge of one sheet along one vertical side of doorway, and secure vertical edge of other sheet along opposite vertical side of doorway.

.2 Reinforce free edges of polyethylene with duct tape and weight bottom edge to ensure proper closing.

.3 Overlap each polyethylene sheet at openings not less than 1.5 m on each side.

.10 Friable material: material that when dry can be crumbled, pulverized, or powdered by hand pressure and includes such material that is crumbled, pulverized, or powdered.

.11 Glove Bag: prefabricated glove bag as follows:

.1 Minimum thickness 0.25 mm (10 mil) polyvinyl-chloride bag.

.2 Integral 0.25 mm (10 mil) thick polyvinyl-chloride gloves and elastic ports.

.3 Equipped with reversible double pull double throw zipper on top and at approximately mid-section of the bag.

.4 Straps for sealing ends around pipe. .12 High Efficiency Particulate Air (HEPA) filtered vacuum equipment with a filter system capable of collecting and retaining fibres greater than 0.3 microns in any direction at 99.97% efficiency.

.12 HEPA Vacuum: High Efficiency Particulate Air (HEPA) filtered vacuum equipment with a filter system capable of collecting and retaining fibres greater than 0.3 microns in any direction at 99.97% efficiency.

.13 Integrity Test: testing method used to determine integrity of Negative Pressure unit/vacuum HEPA-filter leak test.

.14 Landfill: Ministry of the Environment, Conservation and Parks (MECP) licensed landfill

.15 Negative pressure: system that extracts air directly from work area, filters such extracted air through High Efficiency Particulate Air filtering system, and discharges this air directly outside work area to exterior of building.

.1 System to maintain minimum pressure differential of 0.05 mm (0.02 inches) WC (5 Pa) relative to adjacent areas outside of work areas, be equipped with alarm to warn of system breakdown, and be equipped with instrument to continuously monitor and automatically record pressure differences.

.2 Exhaust units fitted with High Efficiency Particulate Aerosol (HEPA) filters used to affect a negative pressure differential in the work area as compared to the immediate surrounding or clean area. The filtering system must be capable of collecting and retaining asbestos fibres to an efficiency of 99.97% for fibres of 0.3 um or larger. The HEPA filters must have been individually tested and certified by the manufacturer and bear a label certifying performance. The unit is to be fitted with instrumentation to indicate pressure differential across the HEPA filter with an audible alarm to sound at a preset low differential pressure.

.3 Construction of HEPA filter/fan cabinet units shall be airtight, and all joints shall be caulked. The gasket seal between the filter housing and the retaining frame inside the cabinet shall provide a zero-leakage seal to avoid filter bypassing.

.4 Each negative pressure unit shall be integrity tested at the work site prior to commencement of asbestos removal. The procedure must include the testing of the integrity of the entire cabinet. Written confirmation of the test results is to be provided to the Owner's Representative. Retesting may be requested by the Owner's Representative and performed by the Contractor should the unit be damaged or modified during the work.

.5 Differential Pressure Recorder/Manometer:

.1 Instrument to monitor and record the differential pressure between the Work Area and Clean Area.

.1 sensitivity:0.05 mm (0.02 inches) WC increments between +0.25 mm to -2.5 mm (+0.010 to 0.100 inches) WC (5Pa) WC increments between +0.25 mm to -2.5 mm (+0.010 to 0.100 inches) WC (5Pa)

.2 accuracy:+/- 1 %

.3 pressure alarms: audible high- and low-level alarm programmable within operating range

.4 printout: minimum 24-hour period at 15 minute intervals

.16 Non-Friable Material: material that when dry cannot be crumbled, pulverized or powdered by hand pressure.

.17 Occupied Area: any area of building or work site that is outside work area.

.18 Owner: The entity that holds legal responsibility for the project, typically the client, property owner, or organization commissioning the work. The Owner has contractual authority over the project and makes key decisions regarding scope, budget, and compliance.

.19 Owner's Representative: A person or organization designated by the Owner to act on their behalf in overseeing the project.

.20 Polyethylene: polyethylene sheeting or rip-proof polyethylene sheeting with tape along edges, around penetrating objects, over cuts and tears, and elsewhere as required to provide protection and isolation.

.21 Wetting Agent: 50% polyoxyethylene ester and 50% polyoxyethylene ether mixed with water in concentration to provide thorough wetting of asbestos containing material.

.22 Sealer: flame spread, and smoke developed rating less than 50.

.23 Slow - drying sealer: non-staining, clear, water - dispersible type that remains tacky on surface for at least 8 hours and designed for purpose of trapping residual asbestos fibres.

.24 Sprayer: garden reservoir type sprayer or airless spray equipment capable of producing mist or fine spray. Must have appropriate capacity for scope of work.

.25 Tape: tape suitable for sealing polyethylene to surfaces under both dry and wet conditions using amended water.

.26 Work Area: area where work takes place which will, or may, disturb ACMs.

1.5 Action and Informational Submittals

.1 Before beginning work:

.1 Submit proof satisfactory to the Owner's Representative that all asbestos workers have received appropriate training and education by a competent person on hazards of asbestos exposure, good personal hygiene, entry and exit from work area, aspects of work procedures and protective measures while working in work areas, and the use, cleaning and disposal of respirators and protective clothing. Submit copies of all training certificates indicating that:

.1 *every supervisor of a worker involved in a has successfully completed the Asbestos Abatement Supervisor Training Program approved by the Ministry of Training, Colleges, and Universities. O.Reg. 278/05, s. 20(1)*.

.2 Ensure supervisory personnel have attended asbestos abatement course, of not less than two days duration, approved by the Owner's Representative. Submit proof of attendance in form of certificate. Minimum of one Supervisor for every ten workers**.** Supervisor must remain on site at all times asbestos removal or cleanup is occurring.

.3 Submit proof satisfactory to the Owner's Representative that employees have respirator fitting and testing in accordance with CAN/CSA Z94.4. Workers must be fit tested (irritant smoke test) with respirator that is personally issued.

.4 Submit provincial and/or local requirements for Notice of Project form.

.5 Submit Workplace Safety and Insurance Board status and transcription of insurance.

.6 Submit proof satisfactory to the Owner's Representative that suitable arrangements have been made to dispose of asbestos containing waste in accordance with requirements of authority having jurisdiction.

.7 Submit to Owner's Representative necessary permits for transportation and disposal of asbestos-containing waste and proof that asbestos-containing waste has been received and properly disposed within 24 hours of leaving Owner's property.

.8 Submit layout of proposed enclosures and decontamination facilities to the Owner's Representative for review.

.9 Proposed work area emergency exit procedures.

.10 Evidence (letter or other suitable documentation) of proper construction, inspection and installation of GFI panel by licensed electrician in compliance to all regulatory requirements and codes.

.11 Submit proof that each negative pressure filter/fan unit has been integrity tested at the work site (and passed the test criteria) in accordance with CAN/CSA Z317.13, prior to commencement of asbestos removal operation.

.12 Submit documentation including test results, fire and flammability data, and Safety Data Sheets (SDS) for chemicals or materials.

.2 Submittals upon completion of work:

.1 Asbestos waste haulage and disposal documentations including Bills of Lading, waste transfer documents and disposal receipts within 24 hours of removal from Owner's property.

.2 All documentation as specified in the contract General Conditions including, but not limited to, Workplace Safety and Insurance Board Certificate, Statutory Declarations and Proof of Publication of Substantial Performance.

1.6 Quality Assurance

.1 Regulatory Requirements: comply with federal, provincial, and local requirements pertaining to asbestos, provided that in case of conflict among these requirements or with these specifications more stringent requirement applies. Comply with regulations in effect at the time work is performed.

.2 Health and Safety:

1. Safety Requirements: worker and visitor protection.

.1 Protective equipment and clothing to be worn by workers while in work area include:

.1 Air purifying half-mask respirator with N-100, R-100, or P-100 particulate filter, personally issued to worker and marked as to efficiency and purpose, suitable for protection against asbestos and acceptable to Provincial Authority having jurisdiction. The respirator to be fitted so that there is an effective seal between the respirator and the worker's face, unless the respirator is equipped with a hood or helmet. The respirator to be cleaned, disinfected, and inspected after use on each shift, or more often, if necessary, when issued for the exclusive use of one worker, or after each use when used by more than one worker. The respirator to have damaged or deteriorated parts replaced prior to being used by a worker; and, when not in use, to be stored in a convenient, clean and sanitary location. The employer to establish written procedures regarding the selection, use and care of respirators, and a copy of the procedures to be provided to and reviewed with each worker who is required to wear a respirator. A worker not to be assign physically able to perform the operation while using the respirator.

.2 Disposable-type protective clothing that does not readily retain or permit penetration of asbestos fibres. Protective clothing to be provided by the employer and worn by every worker who enters the work area, and the protective clothing shall consist of a head covering and full body covering that fits snugly at the ankles, wrists and neck, in order to prevent asbestos fibres from reaching the garments and skin under the protective clothing to include suitable footwear, and to be repaired or replaced if torn.

2. Before leaving work area, the worker must decontaminate his or her protective clothing by using a vacuum equipped with a HEPA filter, or by damp wiping, before removing the protective clothing, or, if the protective clothing will not be reused, place it in a container for dust and waste. The container to be dust tight, suitable for asbestos waste, impervious to

asbestos, identified as asbestos waste, cleaned with a damp cloth or a vacuum equipped with a HEPA filter immediately before removal from the work area, and removed from the work area frequently and at regular intervals.

3. Ensure workers wash hands and face when leaving work area. Facilities for washing are to be in close proximity to the work rea.
4. Eating, drinking, chewing, and smoking are not permitted in work area.
5. Provide and post in Clean Change Room and in Equipment and Access Room the procedures described in this section, in both official languages.
6. Ensure that no person required to enter a work area has facial hair that affects seal between respirator and face.
7. Visitor Protection:
   - .1 Provide protective clothing and approved respirators to Authorized Visitors to work areas.
   - .2 Instruct Authorized Visitors in the use of protective clothing, respirators, and procedures.
   - .3 Instruct Authorized Visitors in proper procedures to be followed in entering into and exiting from work area.

1.7 Waste Management and Disposal

.1 Separate waste materials for reuse and recycling and place in designated containers.

.2 Collect and separate for disposal paper, plastic, polystyrene, corrugated cardboard, packaging material in appropriate on-site bins for recycling.

.3 Remove from site and dispose of packaging materials at appropriate recycling facilities.

.4 Place materials defined as hazardous or toxic in designated containers.

.5 Handle and dispose of hazardous materials in accordance with the CEPA, TDGA, federal, provincial and municipal regulations.

.6 Disposal of asbestos waste generated by removal activities must comply with federal, provincial, and municipal regulations. Dispose asbestos waste in sealed double thickness 0.152 mm thick (6 mil) bags or leak proof drums. Label containers with appropriate warning labels.

.7 Provide Bills of Lading to the Owner's Representative describing and listing waste created and final disposal location. Transport containers by approved means to licensed landfill for burial.

.8 Submit to Owner's Representative proof that asbestos-containing waste has been received and properly disposed within 24 hours of leaving Owner's property.

1.8 Existing Conditions

.1 Arcadis report titled "*Designated Substances and Hazardous Materials Survey – Pre-Renovation, École élémentaire Antonine-Maillet, 615 Ridgeway Avenue, Oshawa, Ontario",* February 26,

2026, indicates the locations of hazardous materials present. Areas requiring special handling under hazardous material precautions are outlined in this Specification package. Asbestos-containing materials identified in the above-referenced report and covered in applicable sections of this specification package include:

.1 Thermal insulation applied to pipe fittings and pipe straight containing 55% Chrysotile in Rooms 101, 102 and 102A.

.2 (12”x12”) Vinyl floor tile – beige with dark brown and white directional flecks containing 7.4% Chrysotile in Room 101.

.3 (9”x9”) Vinyl floor tile – Green and associated mastic containing 13.2% Chrysotile and 2% Chrysotile in Room 101A.

.4 (9”x9”) Vinyl floor tile - beige and associated mastic containing 5% Chrysotile and 2% Chrysotile in Rooms 202 and 203.

.5 Vinyl sheet flooring and associated paper backing mastic containing 9% Chrysotile and 28.6% Chrysotile in Corridor C102.

.6 (2’x2’) Cement board wall panels containing 28% Chrysotile in Corridors C101 and C102 and Room 202.

.7 Solid cement board wall panels containing 23% Chrysotile in Room 202.

.8 Gypsum board with asbestos-containing joint taping compound containing 2.8% Chrysotile applied to walls in Rooms 103, 104, 201, A1 and A2 and to ceilings in Room 101A.

.9 Concrete block-filler paint applied to walls containing 1% Chrysotile throughout the 1961 construction era.

.10 Reinforced autoclaved aerated concrete “Siporex” joint caulking containing 2% Chrysotile in Rooms A1, A2, 201, 202 and 203.

.2 Notify the Owner’s Representative of suspect asbestos-containing material discovered during Work and not apparent from drawings, specifications, or report pertaining to Work. Do not disturb such material until instructed by Owner’s Representative.

1.9 Scheduling

.1 Hours of Work: perform work during normal working hours (8:00 to 16:00) according to Owner’s instructions. Hourly rates are to be provided should after hours work be required. Work beyond the normal working hours may be authorized if the contractor submits the request in writing.

.2 Provide a bar chart indicating planned progress for critical activities as required under Scope of Work as well as additional information listed below a minimum of 48 hours prior to commencement of any preparatory work indicating:

.1 shifts to be worked;

.2 proposed workforce;

.3 starting date;

.4 estimated date of commencement of asbestos removal;

.5 estimated date of completion of asbestos removal;

.6 estimated completion date.

1.10 Personnel Training

.1 Submit proof satisfactory to the Owner's Representative that all asbestos workers and/or supervisor have received appropriate training and education by a competent person in the hazards of asbestos exposure, good personal hygiene and work practices while working in work areas, and the use, cleaning and disposal of respirators and protective clothing.

.2 Submit proof satisfactory to the Owner's Representative that employees have respirator fitting and testing. Workers must be fit tested (irritant smoke test) with respirator that is personally issued in accordance with CAN/CSA Z94.4.

.3 Instruction and training related to respirators includes, at minimum:

.1 Proper fitting of equipment.

.2 Inspection and maintenance of equipment.

.3 Disinfecting of equipment.

.4 Limitations of equipment.

.4 Submit proof that supervisory personnel have attended asbestos abatement course, of not less than two days duration, approved by the Owner's Representative. Minimum of one supervisor for every ten workers.

Part 2 Products

2.1 Materials

.1 Asbestos Waste Containers: contain waste in two separate containers.

.1 Inner container: 0.15 mm thick sealable polyethylene bag (or where glove bag method is used, glove bag itself).

.2 Outer container: sealable metal or fibre type where there are sharp objects included in waste material; otherwise, outer container may be sealable metal or fibre type or second 0.15 mm thick sealable polyethylene bag.

.3 Labelling requirements: affix preprinted cautionary asbestos warning, in both official languages, that is visible when ready for removal to disposal site.

.2 Drop and Enclosure Sheets:

.1 Polyethylene: 0.15 mm thick.

.2 FR polyethylene: 0.15 mm thick woven fibre reinforced fabric bonded both sides with polyethylene.

.3 Glove bag:

.1 Acceptable materials: safe-T-Strip products or suitable alternative, in configuration suitable for Work, or Alternative material approved by addendum during tendering period in accordance with Instructions to Tenderers.

.2 The glove bag to be equipped with:

1. Sleeves and gloves that are permanently sealed to the body of the bag to allow the worker to access and deal with the insulation and maintain a sealed enclosure throughout the work period.
2. Valves or openings to allow insertion of a vacuum hose and the nozzle of a water sprayer while maintaining the seal to the pipe, duct, or similar structure.
3. A tool pouch with a drain.
4. A seamless bottom and a means of sealing off the lower portion of the bag.
5. A high strength double throw zipper and removable straps, if the bag is to be moved during the removal operation.

.4 Wetting Agent: 50% polyoxyethylene ester and 50% polyoxyethylene ether mixed with water in concentration to provide thorough wetting of asbestos containing material.

.5 Sealer: flame spread, and smoke developed rating less than 50.

.6 Sealant: Slow - drying sealant non-staining, clear, water – dispersible type) that remains tacky on surface for at least 8 hours and designed for purpose of trapping residual asbestos fibres.

.7 Tape: tape suitable for sealing polyethylene to surfaces under both dry and wet conditions using amended water.

2.2 Equipment

.1 All equipment brought on site must be thoroughly clean and free of all fibre, asbestos or otherwise, to the satisfaction of the Field Inspector. The Contractor will be fully responsible for the replacement of equipment rejected by the Inspector and for all costs resulting from site contamination due to dirty or faulty equipment.

.2 Airless Sprayer:

.1 Spray equipment for the application of amended water and sealant such as Graco Hydrospray or equivalent:

.1 Fine atomizing spray nozzle: Nozzle for airless sprayer capable of delivering not less than 4.5 L per minute of fine particle spray of amended water.

.3 Garden Sprayer:

.1 Hand pump-type pressure-can garden sprayer fabricated out of either metal or plastic equipped with a wand at the end of a hose that can deliver a stream or spray of liquid under pressure. **Only to be used on small removal and repair projects with the approval of the site inspector.**

.4 HEPA Vacuum:

.1 High Efficiency Particulate Aerosol filtered vacuum equipment. Must have a filtering system capable of collecting and retaining asbestos fibres to an efficiency of 99.97% for fibres of 0.3 um or larger. HEPA filters must have been individually tested and certified by the manufacturer.

.2 All HEPA vacuums brought onto the job site shall be visibly clean, shall be in a good state of repair and shall be maintained in such state through completion of the project.

.5 Ground Fault Panel:

.1 Electrical Panel equipped with ground fault circuit breakers of sufficient capacity to power all electrical equipment and lights in work area. All breakers shall have 5 mA ground fault protection. Panel should be complete with all necessary accessories including ground fault interrupter lights, test switch to ensure unit is working, and reset switch. Ground fault receptacles on extension cords shall not be used without written authorization by the Owner's Representative.

.2 The GFI Panel must be constructed under the direction of a licensed Electrician and inspected by a licensed Electrician on a regular basis. Evidence of such construction and inspection shall be submitted to the Owner's Representative prior to installation of the Panel on site.

.6 Negative Pressure Units:

.1 Exhaust units fitted with High Efficiency Particulate Aerosol (HEPA) filters used to affect a negative pressure differential in the work area as compared to the immediate surrounding or clean area. The filtering system must be capable of collecting and retaining asbestos fibres to an efficiency of 99.97% for fibres of 0.3 um or larger. The HEPA filters must have been individually tested and certified by the manufacturer and bear a label certifying performance. The unit is to be fitted with instrumentation to indicate pressure differential across the HEPA filter with an audible alarm to sound at a preset low differential pressure.

.2 Construction of HEPA filter/fan cabinet units shall be airtight and all joints shall be caulked. The gasket seal between the filter housing and the retaining frame inside the cabinet shall provide a zero-leakage seal to avoid filter bypassing.

.3 **If installed, each negative pressure unit shall be integrity tested at the work site prior to commencement of asbestos removal.** The procedure must include the testing of the integrity of the entire cabinet. Written confirmation of the test results are to be provided to the Inspector. Retesting may be requested by the Inspector and performed by the Contractor should the unit be damaged or modified during the work.

Part 3 Execution

3.1 Supervision

.1 Supervisor must meet the requirements of this specification.

.2 Minimum of one Supervisor for every ten workers is required.

.3 Approved Supervisor must remain within work area during disturbance, removal, or other handling of asbestos-containing materials.

3.2 Asbestos Abatement

.1 Do not begin work until Owner's Representative has provided authorization to proceed.

.2 Before beginning Work, at each access to work area, install warning signs in both official languages in upper case 'Helvetica Medium' letters reading as follows, where number in parentheses indicates font size to be used: 'CAUTION ASBESTOS HAZARD AREA (25 mm) / NO UNAUTHORIZED ENTRY (19 mm) / WEAR ASSIGNED PROTECTIVE EQUIPMENT (19 mm) / BREATHING ASBESTOS DUST MAY CAUSE SERIOUS BODILY HARM (7 mm).

.3 Before beginning Work remove visible dust from surfaces in work area where dust is likely to be disturbed during course of work.

.1 Use HEPA vacuum or damp cloths where damp cleaning does not create hazard and is otherwise appropriate.

.2 Do not use compressed air to clean up or remove dust from any surface.

.4 Prevent spread of dust from work area using measures appropriate to work to be done.

.1 Use FR polyethylene drop sheets over flooring such as carpeting that absorbs dust and over flooring in work areas where dust or contamination cannot otherwise be safely contained.

.2 When removing suspended ceilings and walls themselves do not enclose work area and when removing asbestos containing material from piping or equipment and "glove bag" method is not used, erect enclosure of polyethylene sheeting around work area, shut off mechanical ventilation system serving work area and seal ventilation ducts to and from work area.

.5 Separate the work areas using rope barriers, signage and other appropriate methods.

.6 Construct a two-chamber decontamination facility/frame for the enclosure from 50 mm x 100 mm (2” x 4”) studs or other suitable material.

.7 Cover all sides of the enclosure with clear 0.15 mm opaque polyethylene sheeting sealed with duct tape. Curtains of polyethylene sheeting must be fitted on each side of the entrance of the enclosure (curtain flaps may require weights at the bottom to ensure proper closing).

.8 Wear an appropriate respirator approved for use with asbestos and suitable protective equipment. Only persons wearing protective clothing and equipment shall be allowed to enter the work area.

.9 Only power tools connected to a dust-collecting device equipped with a HEPA filter are permitted to be used.

.10 Remove any loose materials by HEPA vacuum; thoroughly wet material containing asbestos to be removed or disturbed before and during Work unless wetting creates hazard or causes damage.

.1 Use garden reservoir type low - velocity sprayer or airless spray equipment capable of producing mist or fine spray.

.2 Perform Work in a manner to reduce dust creation to lowest levels practicable.

.3 Work is subject to visual inspection.

.4 Contamination of surrounding areas indicated by visual inspection or air monitoring will require complete enclosure and clean-up of affected areas at no cost to the Owner.

3.3 Cleanup

.1 Frequently during Work and immediately after completion of work, clean up dust and asbestos containing waste using HEPA vacuum or by damp mopping.

.2 Place dust and asbestos containing waste in sealed dust tight waste bags. Treat drop sheets and disposable protective clothing as asbestos waste and wet and fold to contain dust and then place in waste bags.

.3 Immediately before their removal from work area and disposal, clean each filled waste bag using damp cloths or HEPA vacuum and place in second clean waste bag.

.4 Seal and remove double bagged waste from site. Dispose in accordance with requirements of Provincial and Federal Authority having jurisdiction. Supervise dumping and ensure that landfill

operator is fully aware of hazardous nature of material to be dumped and that guidelines and regulations for asbestos disposal are followed.

.5 Perform final thorough clean-up of work areas and adjacent areas affected by Work using HEPA vacuum.

3.4 Inspection

.1 Prior to the beginning of removal, Owner's Representative will perform a pre-abatement inspection on the work area. The pre-abatement inspection will be completed to ensure all equipment required to complete the measures and procedures that apply to Type 2/moderate-risk activities are present. Deviation from these requirements that have not been approved in writing by the Owner's Representative and/or Owner may result in work stoppage, at no cost to the Owner.

.2 Following completion of the work, the Owner's Representative must be contacted to complete a final visual inspection. This inspection must be organised by the contractor with a minimum of twenty-four (24) hours notice.

.3 Owner's Representative will inspect work for:

.1 Adherence to specific procedures and materials requirements.

.2 Compliance with specification and governing authority requirements prior to contaminated work; and,

.3 Final cleanliness and completion. Work area will be considered clean when all visible dust and debris is removed from the substrate to which it was adhered and deemed acceptable to the Owner's Representative. No distinction will be made about the content of the dust or debris.

.4 When asbestos leakage from work area has occurred or is likely to occur the Owner's Representative may order Work shutdown.

.5 No additional costs will be allowed by Contractor for additional labour or materials required to provide specified performance level.

3.4 Air Monitoring

.1 Not Applicable.

3.5 Clearance Air Sampling

.1 Not Applicable.

3.4 Final Cleanup

.1 Not Applicable.

3.5 Re-Establishment of Objects and Systems

.1 Not Applicable.

END OF SECTION