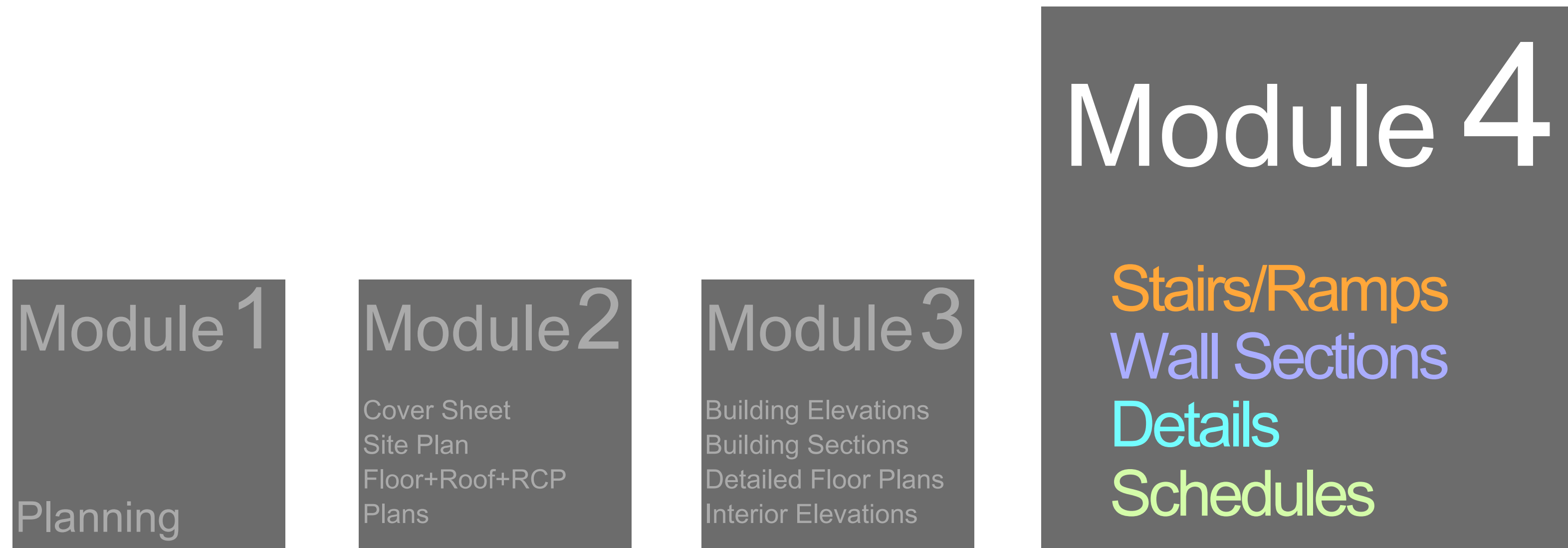


# PRODUCTION OF A CONSTRUCTION DRAWING SET

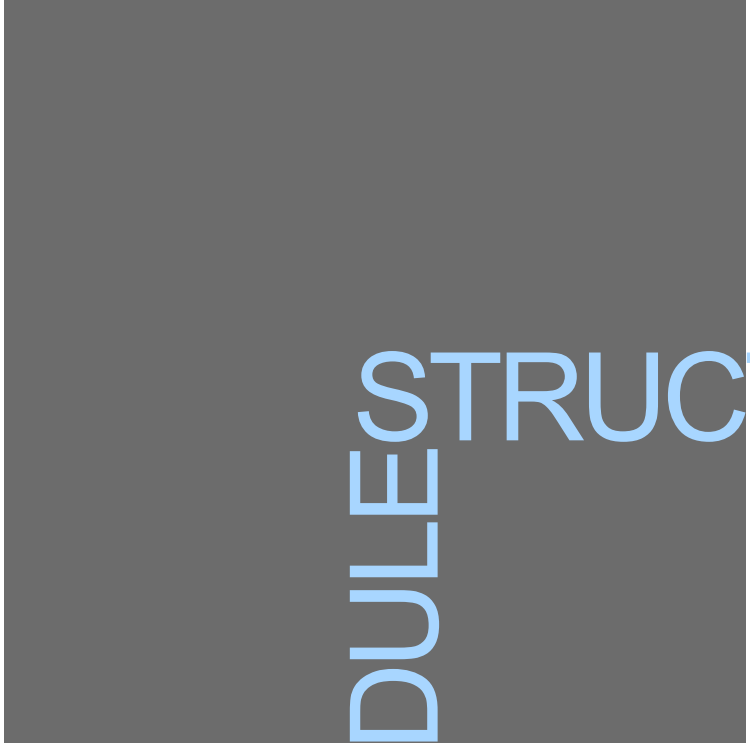


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# PRODUCTION OF A CONSTRUCTION DRAWING SET



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## MODULES STRUCTURE

1. **Introduction**, drawing types for the module
2. **Content** of each drawing type, building up process
3. **Common errors** and omissions with possible solutions
4. **Check list** as a tool to review the work
5. **Bibliography** as a guide to research more in depth

CONSTRUCTION  
DOCUMENTS  
DRAWINGS  
SERIES

A8  
WALL  
SECTIONS

A5  
DETAILED  
FLOOR  
PLANS

A2  
FLOOR  
+ ROOF +RCP  
PLANS

A10  
SCHEDULES

A7  
STAIRS  
RAMPS

A4  
BUILDING  
SECTIONS

A1  
SITE  
PLAN

A9  
DETAILS

A6  
INTERIOR  
ELEVATIONS

A3  
BUILDING  
ELEVATIONS

A0  
COVER  
SHEET

# Scales:

$1/4"=1'-0"$

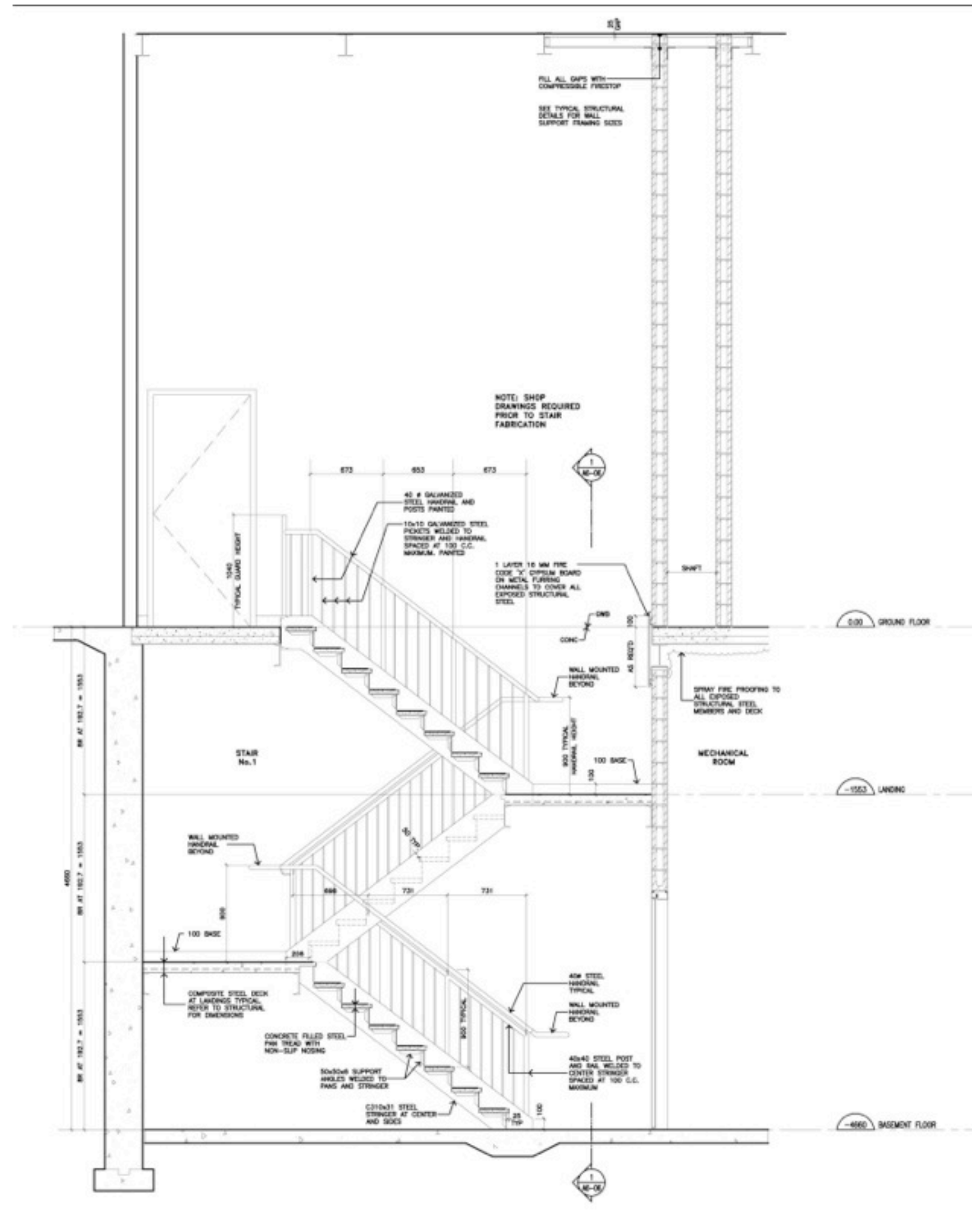
1:50

$1-1/2"=1'-0"$

1:10

$3"=1'-0"$

1:5



- **Grid** lines with reference symbols, Elevation Floor **Levels**
- **Widths**, Lengths, Landings, Clearance to doors, **Handrails**. Continuous on both sides of stairway and extended horizontally beyond top and bottom of stairway,
- Uniform run/rise in any one flight, Maximum **vertical rise of flights between floor**, Minimum headroom clearance maintained
- **Guards height**, limited opening sizes through guards designed to prevent climbing
- **Dimensions**. Tread, riser, Horizontal, Vertical, Landings, Height of handrails
- **Annotations**
- **Cross Reference**

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# A7 STAIRS/RAMPS PLANS.SECTIONS.DETAILS

1/4"=1'-0" 1:50 1-1/2"=1'-0" 1:10 3"=1'-0" 1:5

scale

OOPS

- Stair **does not meet** the code
- Handrail **does not work** at turns
- Handrail height is **confused with guardrail** height at landings
- Up and down **arrows** are missing or wrong

SMART

- Review **building code** to make sure stair is designed accordingly
- Make sure the **calculations** are correct for the railing height at turns
- **Review** building code for railing and guardrails height, make sure notation is correct for each condition
- Show **consistent** arrows head and label for stair direction.



## CHECK LIST

- **Grid** and grid dimensions
- Elevation floor **levels**, confirm all runs work according floor to floor height as well head room
- Confirm stairs meet code, **Widths**, Lengths, Landings, Clearance to doors, coordinate with building sections for finished floor level
- **Handrails**. Continuous on both sides of stairway and extended horizontally beyond top and bottom of stairway
- Uniform run/rise in any one flight, Maximum **vertical rise of flights between floor**, Minimum headroom clearance maintained
- **Guards height**, limited opening sizes through guards, designed to prevent climbing, coordinate with **structural** for supports and anchors
- Detailed **dimensions**, Tread, riser, Horizontal, Vertical, Landings, Height of handrails
- **Annotations**
- **Cross references** to sections and details



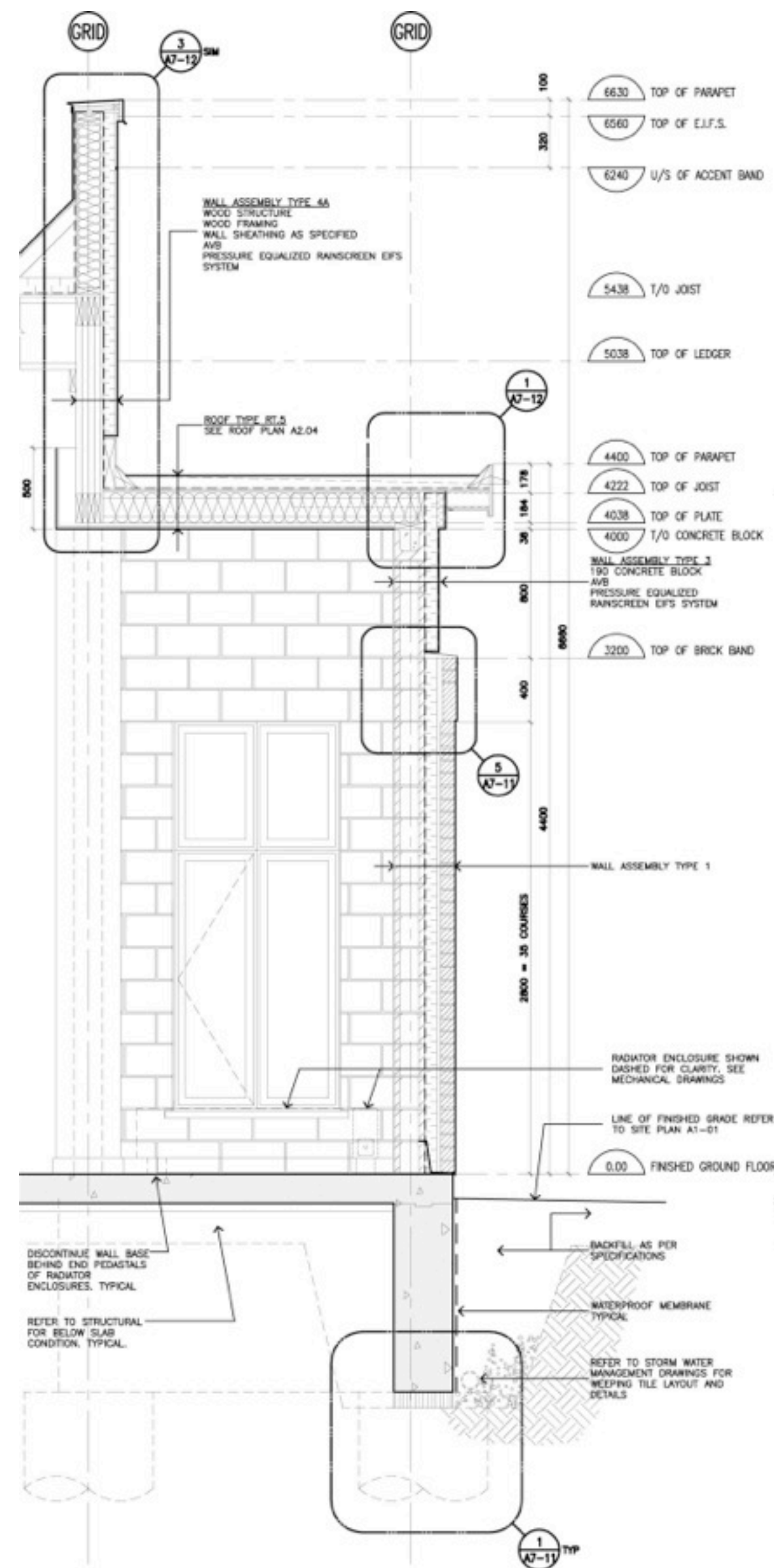
# Scales:

$3/4'' = 1'-0''$

$1/2'' = 1'-0''$

1:20

1:25



- Grid lines with reference symbols, Elevation Floor Levels
- Structural elements, Footing, Backfill line, Foundation Drainage
- Building Components from Footing to Roof, Wall/Roof Assemblies
- Typical Window or Door condition
- Mechanical
- Vertical dimensions
- Annotations, Wall/Roof assemblies
- Cross Reference

OOPS

SMART

- Footings/drainage are missing or incorrect
- Assemblies descriptions are not the same as specifications
- Assemblies descriptions are duplicated
- Coordinate with structural and mechanical to add accurate information
- Coordinate with specifications to ensure descriptions are consistent.
- Coordinate between wall sections and details to assign information for each series to avoid repetition

## CHECK LIST

- **Grid** and Grid dimensions
- Elevation floor **levels**
- Structural elements, Column line as required, **Footing**, Backfill line, Foundation Drainage
- **Building Components** from footing to roof. Wall/Roof assemblies. Indicate location /Material of air/Vapour barriers
- Typical **Window** or Door condition
- Vertical **Dimensions** and Column line dimensioned to wall face
- **Annotations**, Wall/Roof type assemblies. Check specification descriptions and coordinate drawings to match
- **Cross references** to details. Ensure wall sections cover all building conditions and cross references to details are complete and correct

# Scales:

Full Size

1:1

Half Size

1:2

3"=1'-0"

1:5

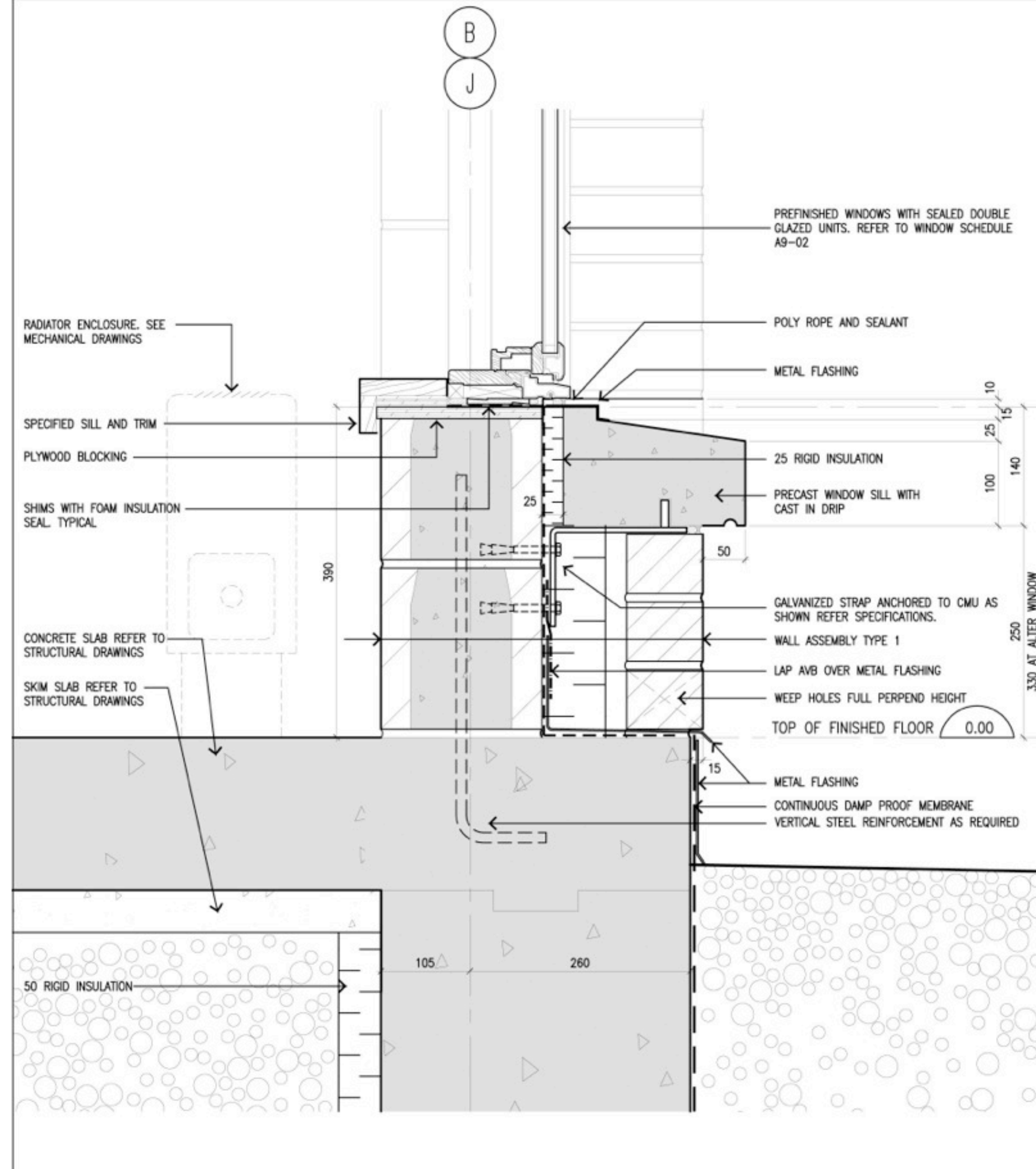
1-1/2"=1'-0"

1:10

1"=1'-0"

1:12





- **Grid** lines with reference symbols, Elevation Floor Levels
- **Structural Elements**, Foundation as Required
- **Wall assembly** Showing Mounting and Supporting Components
- **Windows/Doors** with type description
- Background **Projection Lines**
- **Mechanical** and Other Equipment
- Vertical **Dimensions** for Section details or Horizontal Dimensions for Plan details
- **Annotations**

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**A9** DETAILS

Full Size 1:1    Half Size 1:2    3"=1'-0" 1:5    1-1/2"=1'-0" 1:10    1"=1'-0" 1:12

scale

OOPS

SMART

- **Descriptions** are **repeated**
- **Descriptions** are not the same as **specifications**
- **Details** are **duplicated**
- **Coordinate** within the details sheet to avoid repeating information. Details with same description should refer to the first detail on the sheet which has the information
- Check **specifications** descriptions and coordinate drawings to match
- Coordinate **details selection** and **details sheets** to ensure all building conditions are covered but not repeated.

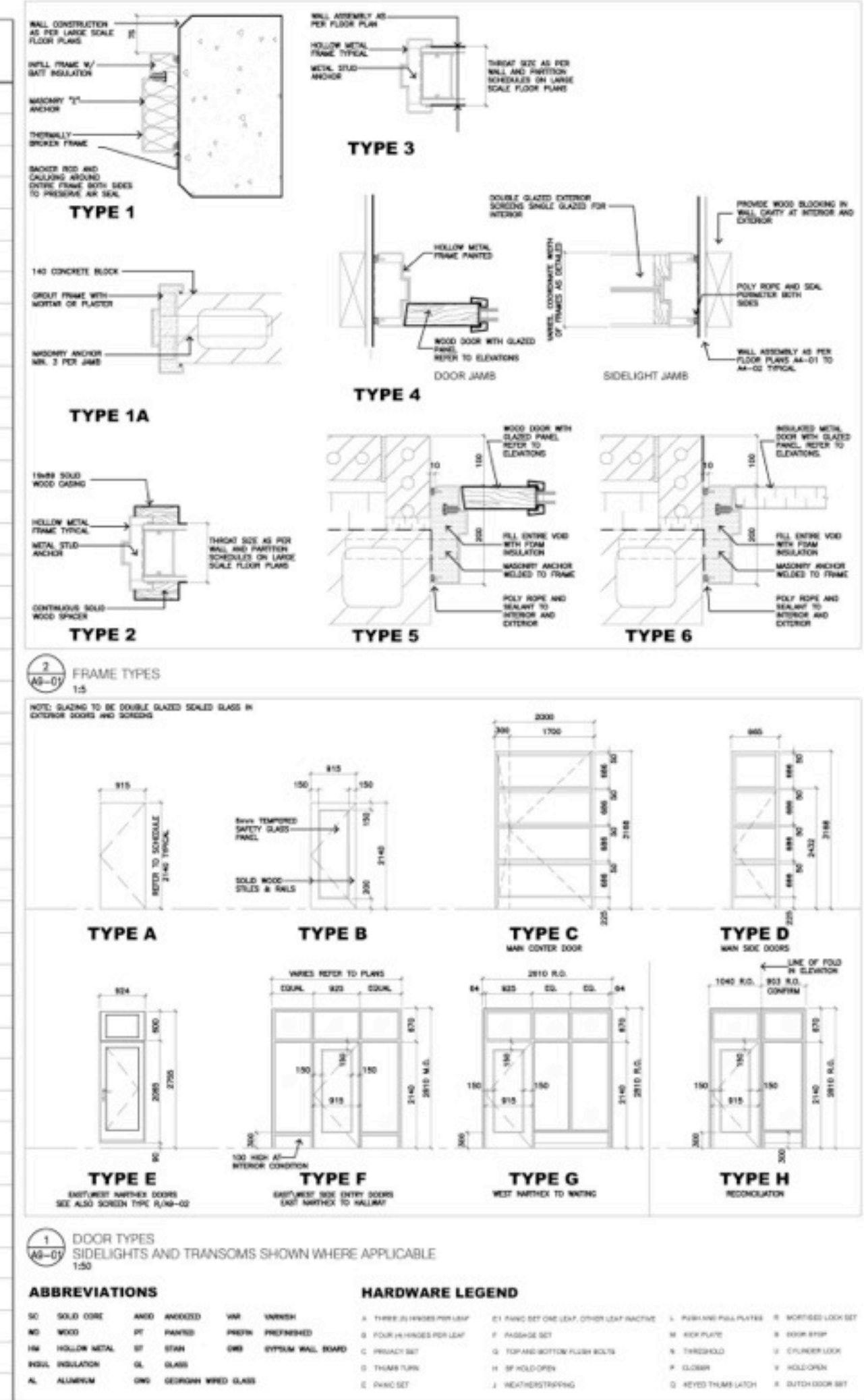


## CHECK LIST

- **Grid** and Grid dimensions
- Elevation floor **levels** for section details
- **Structural** elements as required, Columns, Beams or Foundation according to the detail type
- **Wall assembly** showing mounting and supporting components, Air/Vapour barriers
- Background **projection lines**
- **Mechanical** and other equipment
- **Dimensions** not already shown on plans/elevations/building sections, Vertical Dimensions for section details or Horizontal dimensions for plan details
- **Annotations**, Typical assemblies, through-wall flashings, Air/Vapour barriers. Check specification descriptions and coordinate drawings to match.

# DOOR SCHEDULE

DOOR No.	LOCATION	DOOR						FRAME			HARDWARE	REMARKS	
		WIDTH	HEIGHT	THICKNESS	TYPE	MATERIAL	FINISH	FIRE RATING	TYPE	MATERIAL			FINISH
101A	HATCH 101 TO EXTERIOR	2000	3140	58	C	WD	ST & VAR	-	*	WD	ST & VAR	G	* PRST DOOR
101B	HATCH 101 TO EXTERIOR EAST	915 (2*)	3140	45	D	WD	ST & VAR	-	4	WD	ST & VAR	A, P, S, E, G, J, N	* ADDITIONAL 762 FIXED DOOR PANEL
101C	HATCH 101 TO EXTERIOR WEST	915 (2*)	3140	45	D	WD	ST & VAR	-	4	WD	ST & VAR	A, P, S, E, G, J, N	* ADDITIONAL 762 FIXED DOOR PANEL
102A	HATCH 102 TO EXTERIOR	2000	3140	58	C	WD	ST & VAR	-	*	WD	ST & VAR	G	* PRST DOOR
102B	HATCH 102 TO EXTERIOR EAST	915 (2*)	3140	45	D	WD	ST & VAR	-	4	WD	ST & VAR	A, P, S, G, E	* ADDITIONAL 762 FIXED DOOR PANEL
102C	HATCH 102 TO EXTERIOR WEST	915 (2*)	3140	45	D	WD	ST & VAR	-	4	WD	ST & VAR	A, P, S, G, E	* ADDITIONAL 762 FIXED DOOR PANEL
102D	HATCH 102 TO EXTERIOR	954	2065	45	*	WD/GL	ST & VAR	-	*	*	*	A, R, E, P, J, N	* REFER TO WINDOW TYPE F ON A0-02
102E	HATCH 102 TO EXTERIOR	954	2065	45	*	WD/GL	ST & VAR	-	*	*	*	A, R, E, P, J, N	* REFER TO WINDOW TYPE F ON A0-02
103A	HATCH 103 TO HATCH 101	915	2140	45	A	WD	ST & VAR	-	2	HM	PT	A, S, R	
103B	HATCH 103 TO HATCH 102	915	2140	45	A	WD	ST & VAR	-	2	HM	PT	A, S, R	
104	MECHANICAL ROOM 104 TO HATCH 102	915	2140	45	B	WD/GL	ST & VAR	-	2	HM	PT	A, S, G	
106	HATCH 102 TO WORKING HATCH 106	915	2140	45	A	WD	ST & VAR	-	3	HM	PT	A, S, R	
107	HATCH 102 TO STORAGE 107	915	2140	45	A	WD	ST & VAR	-	3	HM	PT	A, R, S, Y	
108A	HATCH 102 TO STORAGE 108	915	2140	45	A	HW	PT	45 MN	3	HM	PT	A, R, S, Y	
108B	WEN'S W.R. 108 TO STORAGE 108	915	2140	45	A	HW	PT	45 MN	3	HM	PT	A, R, S, Y	
109	HATCH 101 TO WEN'S W.R. 109	915	2140	45	A	WD	ST & VAR	-	2*	HM	PT	A, L, M, S	* CASING ON HATCH SIDE ONLY
110	NOT USED												
111	HATCH 101 TO HATCH 111	915	2140	45	A	WD	ST & VAR	-	2*	HM	PT	A, L, M, S	* CASING ON HATCH SIDE ONLY
112A	HATCH 101 TO HALLWAY 112	915	2140	45	F	WD/GL	ST & VAR	-	4	WD	ST & VAR	A, S, C, P, F	
112B	HALLWAY 112 TO EXTERIOR	915	2140	45	F	WD/GL	ST & VAR	-	5	WD	ST & VAR	A, J, E, P, R, H	
113	HALLWAY 112 TO MEETING ROOM 113	915	2140	45	B	WD/GL	ST & VAR	-	3	HM	PT	A, S, R	
114	NOT USED												
115A	HALLWAY 112 TO MEETING ROOM 115	915	2140	45	B	WD/GL	ST & VAR	-	3	HM	PT	A, S, R	
115B	STORAGE 118 TO MEETING ROOM 115	915	2140	45	A	WD	ST & VAR	-	3	HM	PT	A, R, S, Y	
117	HALLWAY 112 TO HATCH 117	915	2140	45	A	WD	ST & VAR	-	3	HM	PT	A, S, P, R	
118	HATCH 101 TO STORAGE 118	915	2140	45	A	WD	ST & VAR	45 MN	3	HM	PT	A, S, P, R	
118A	MEETING 123 RESTROOM 119	915	2140	45	F	WD/GL	ST & VAR	-	4	WD	ST & VAR	A, S, C, P, F, H	
118B	RESTROOM 119 TO EXTERIOR	915	2140	45	F	WD/GL	ST & VAR	-	5	WD	ST & VAR	A, J, E, P, R, H	
120	NOT USED												
121	MEETING 123 TO MEETING ROOM 121	915	2140	45	B	WD/GL	ST & VAR	-	3	HM	PT	A, S, R	
122	STORAGE 122 TO MEETING 123	915	2140	45	A	WD	ST & VAR	-	3	HM	PT	A, R, P, S, V, R	
123	HATCH 101 TO MEETING 123	915	2140	45	D	WD/GL	ST & VAR	-	4	WD	ST & VAR	A, S, R	
124	COFFE 120 TO W.R. 124	810	2140	45	A	WD	ST & VAR	-	3	HM	PT	A, C, S, P	
125	NOT USED												
126	RECEPTION 120 TO PROJECTS OFFICE 126	915	2140	45	B	WD/GL	ST & VAR	-	3	HM	PT	A, S, R	
127	DOORS 127 TO RECEPTION 120	1000 (2ND)	2140	45	A	WD	ST & VAR	-	3	HM	PT	A, F	
128	RECEPTION 120 TO OFFICE 128	915	2140	45	B	WD/GL	ST & VAR	-	3	HM	PT	A, S, R	
129	ELECTRICAL ROOM 129 TO EXTERIOR	915	2140	45	A	HW	PT	45 MN	6	HM	PT	A, J, R, P, H	
130A	HALLWAY 112 TO MECHANICAL ROOM 130	915	2140	45	A	HW	PT	45 MN	3	HM	PT	A, S, R	
130B	MECHANICAL ROOM 130 TO EXTERIOR	915	2140	45	A	HW	PT	45 MN	6	HM	PT	A, J, R, P, H	
131A	STORAGE 108 TO GARAGE ROOM 131	915	2140	45	A	HW	PT	45 MN	3	HM	PT	A, S, R	
131B	GARAGE ROOM 131 TO EXTERIOR	915	2140	45	A	HW	PT	45 MN	6	HM	PT	A, J, R, P, H	



- Abbreviations and Hardware Legend
- Door/Window Types
- Door/Window Frames
- Door/Window Schedule

OOPS

SMART

- **Abbreviations** are **missing**
- **Incomplete** door/window frame **details**
- **Coordinate** with specification to ensure all abbreviations are added and correct
- **Check** all door/windows conditions and make sure details cover all of them.

## CHECK LIST

- **Wall types** if not shown on floor plans
- **Roof types** if not shown on roof plan
- **Door types**, frames and schedule
- **Window types**, frames and schedule
- **Hardware**, confirm all numbers and names are included. Coordinate with specifications to match
  
- **Room Finishes**
- Any other **schedule as required**
- **Abbreviations** list. Coordinate list with specifications to match

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LARKIN ARCHITECT LIMITED (DESIGN)

POWERS OF TEN  
[www.powersof10.com](http://www.powersof10.com)

GOOGLE MAPS

**bibliography**





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**MAY 2012**

This series is intended to clarify architectural working drawings production and development and the slides represent a compressed summary of the complete version of a working drawing set. For a more detailed guide, a review of the Canadian Handbook of Practice for Architects is highly recommended.