

# Wall Panels



- Structural wall panel
- Architectural wall panel
- Cladding wall panel
- Sandwich wall panel





# Wall Panels

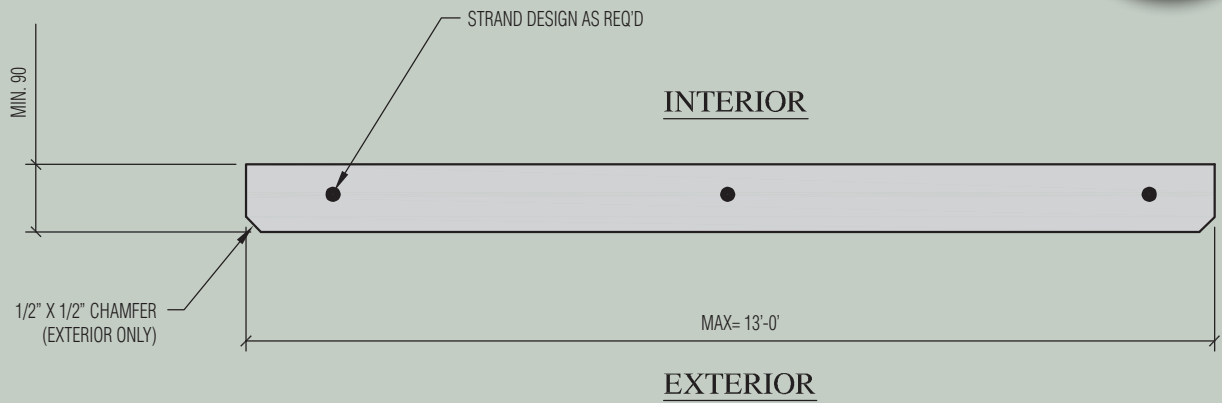


- Assorted styles and colours
- Reveals and other patterns
- Painted finish
- Bolted, welded and knife connections available

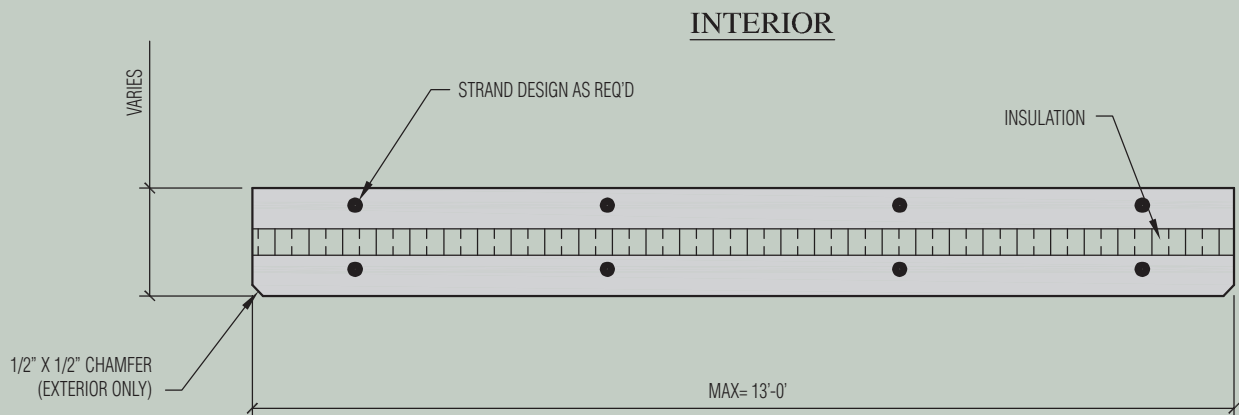




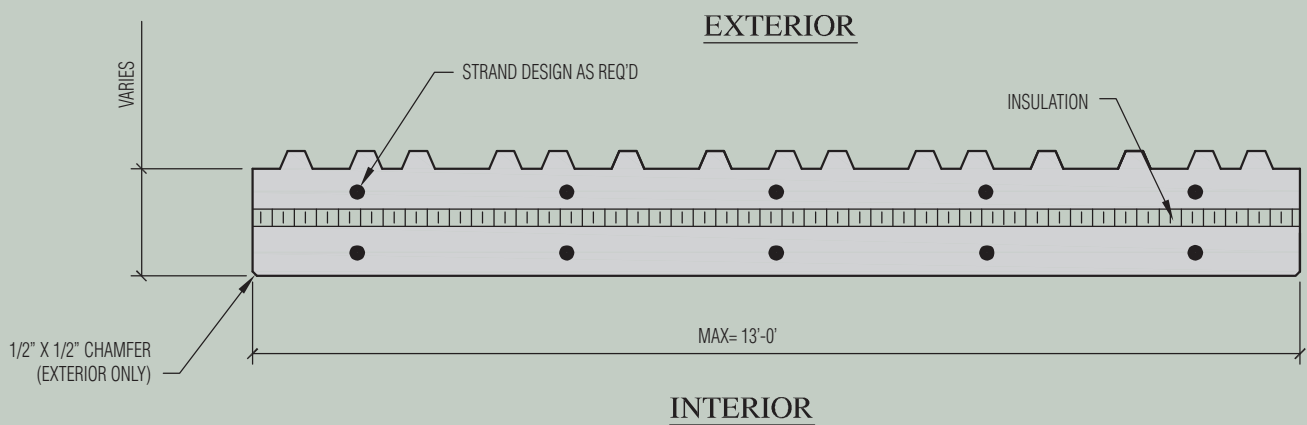
# Wall Panel Sections



Solid Cladding Panel

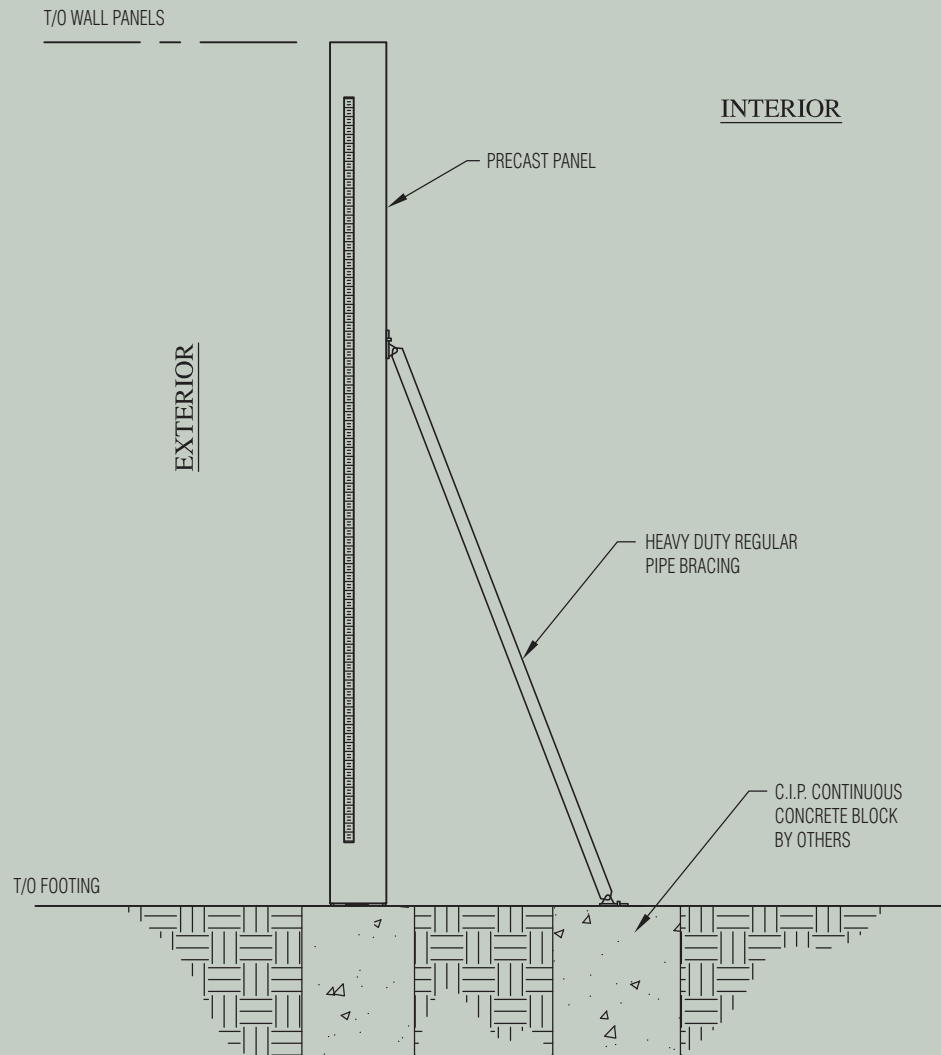


Insul. Cladding/Structural Panel



Insulated Ribbed Panel

# Wall Panel Connection Details



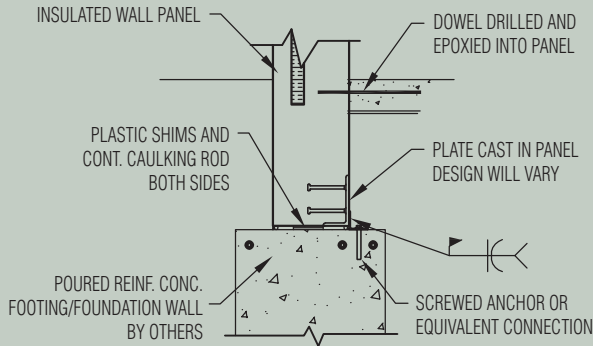
## Structural Notes

- Design wind loads - 1.2kPa (25PSF)
- Install braces at 1220 (4'-0") nominal spacing, at panels supported by knife connections the braces can be added to the supporting panels.
- Cast in place concrete to be minimum 30 MPa
- Braces to be anchored using 5" long 5/8" HILTI HUS-H screw anchor or approved equivalent installed in accordance with manufacturers recommendations
- Screw anchors to have minimum 3" embedment in wall panels
- Screw anchors to have minimum 4" embedment in cast in place concrete

# Wall Panel Connection Details

EXTERIOR

INTERIOR

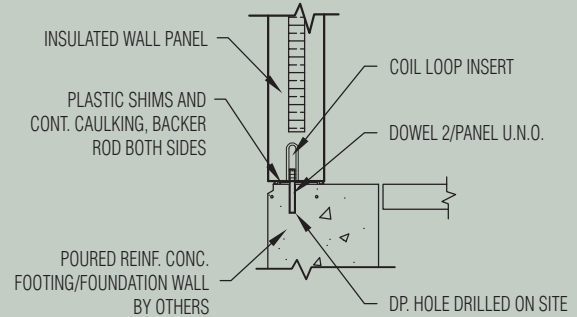


**WL01**

Bottom connection cast in plate

EXTERIOR

INTERIOR

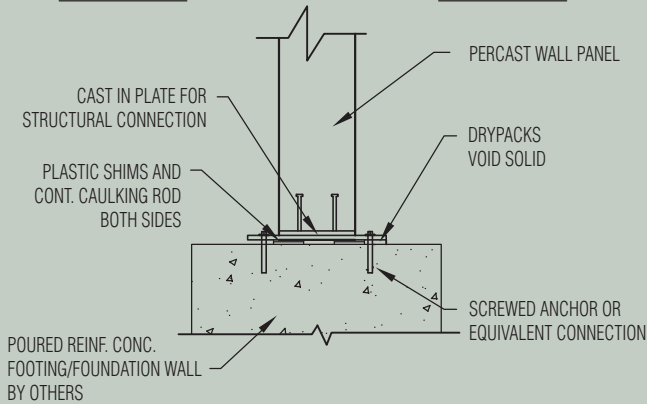


**WL02**

Bottom connection dowel connection

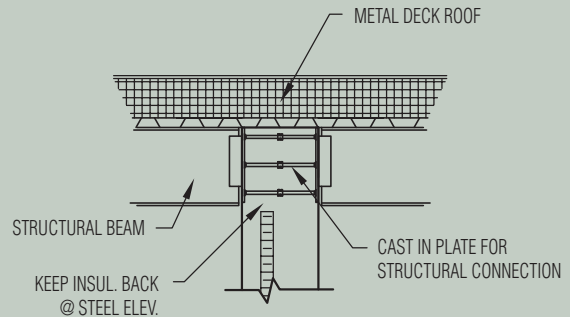
EXTERIOR

EXTERIOR



**WL03**

Bottom connection cast in plate

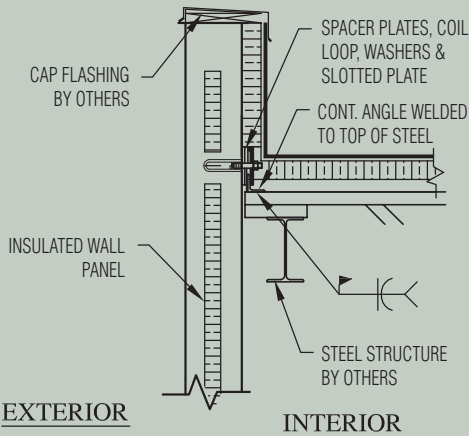


INTERIOR

INTERIOR

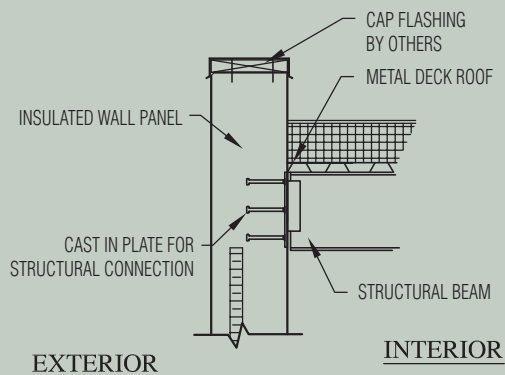
**WL04**

Deck bearing back to back connection



**WL05**

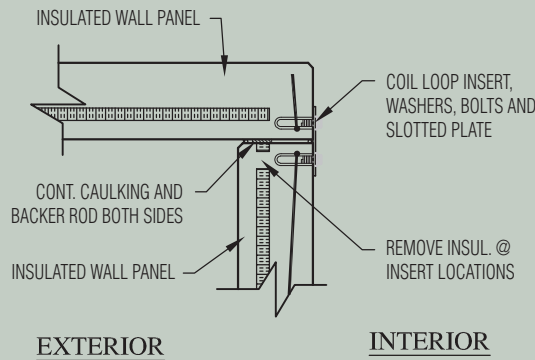
Lateral connection T/O panel



**WL06**

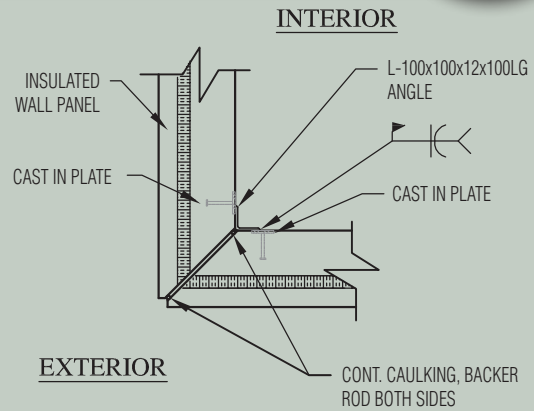
Deck bearing / Beam connection

# Wall Panel Connection Details



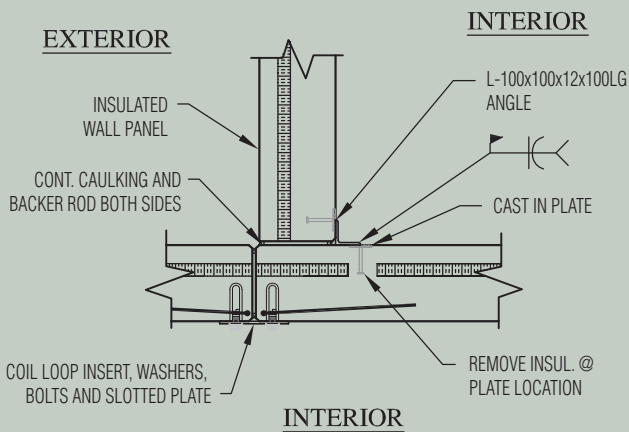
**WL07**

Exterior 90° corner connection



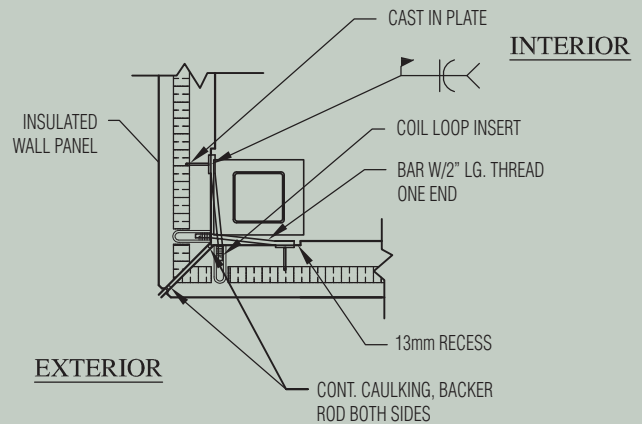
**WL08**

Exterior 90° corner connection



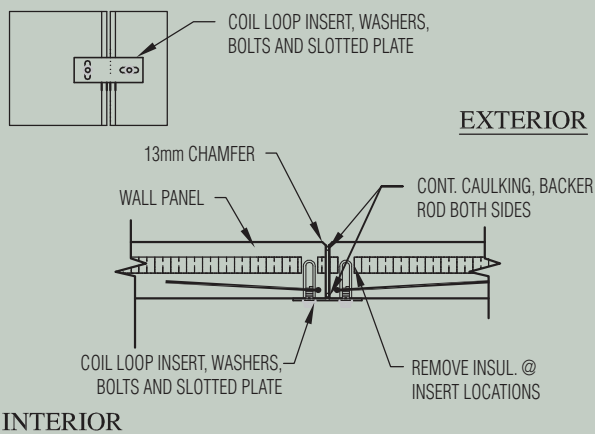
**WL09**

Intersecting 90° corner connection



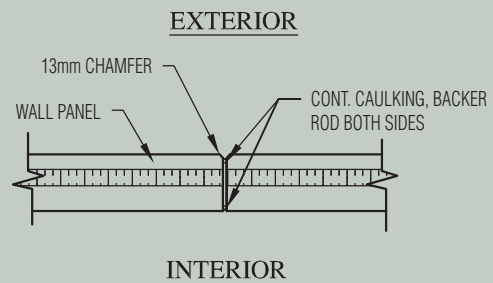
**WL10**

Exterior 90° corner connection



**WL11**

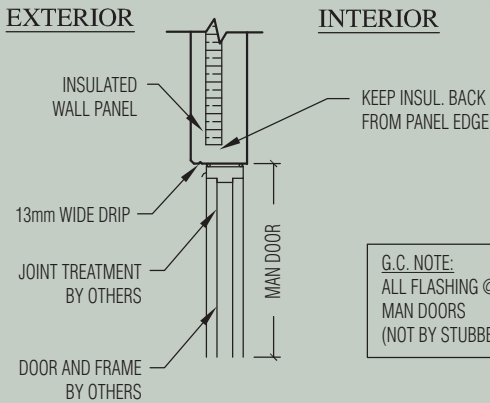
Panel to panel connection



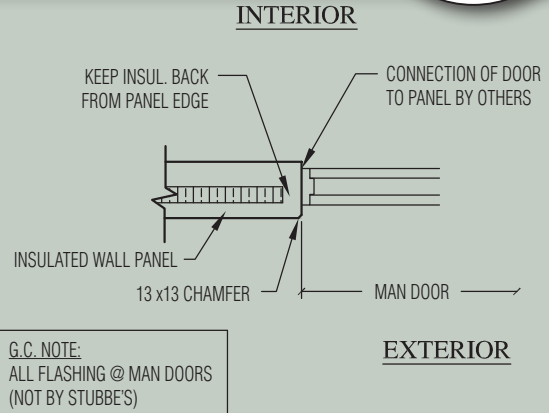
**WL12**

Panel to panel vertical

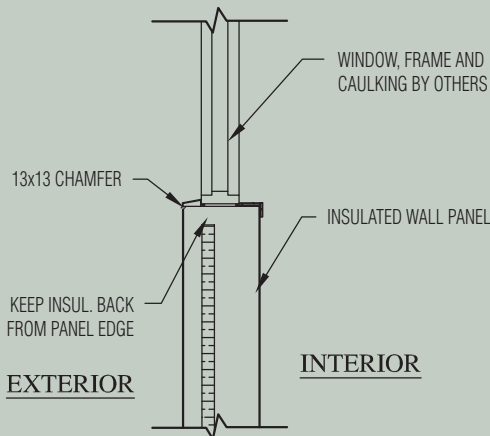
# Wall Panel Connection Details



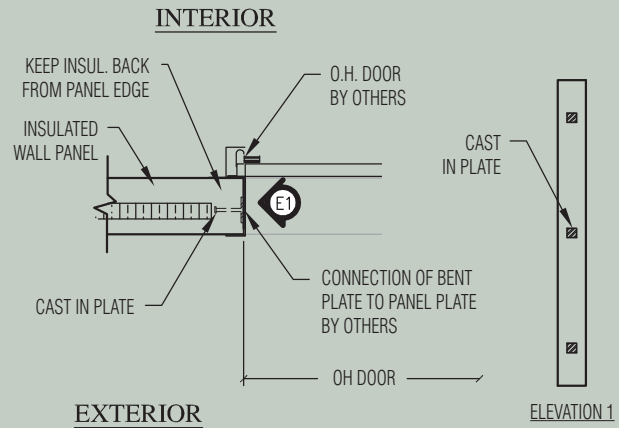
**WL13** Panel edge @ head of man door (top view)



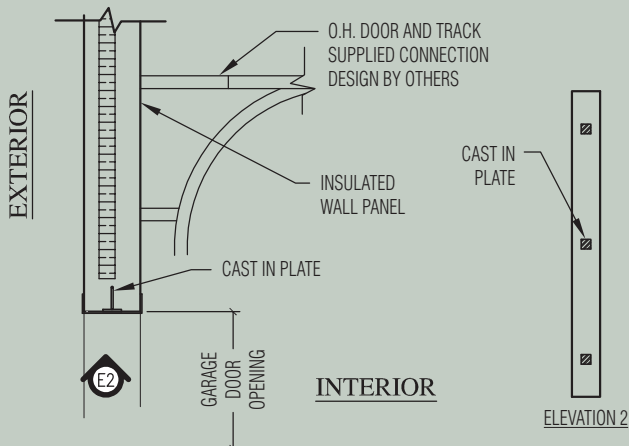
**WL14** Panel edge @ head of man door (side view)



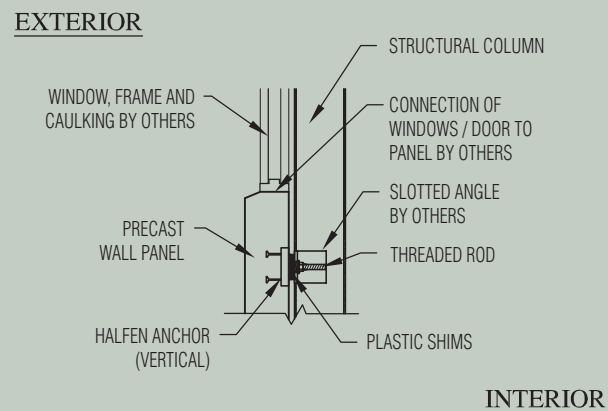
**WL15** Panel edge @ window sill on exterior panels



**WL16** Door jam @ O.H. door #1

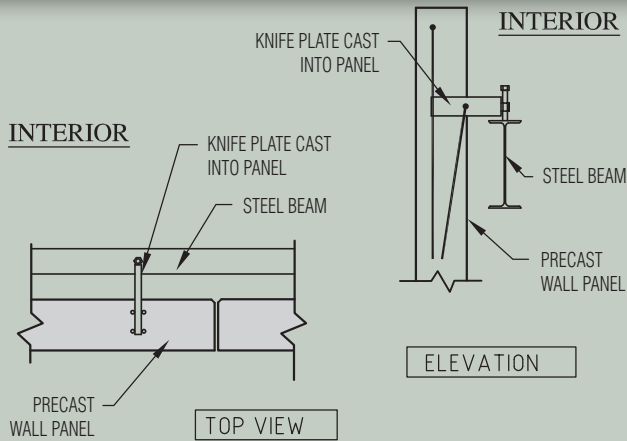


**WL17** Door jam @ O.H. door #2

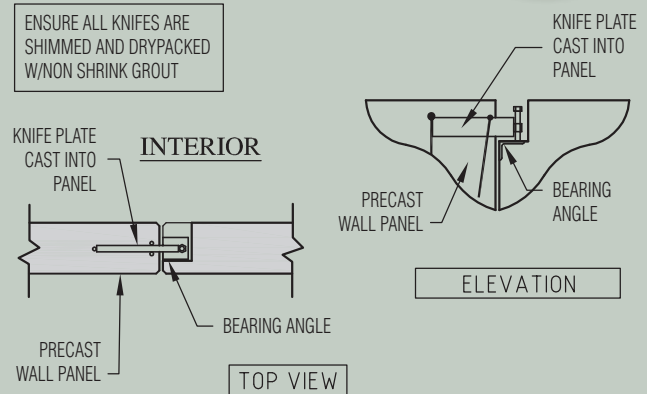


**WL18** Panel to column connection

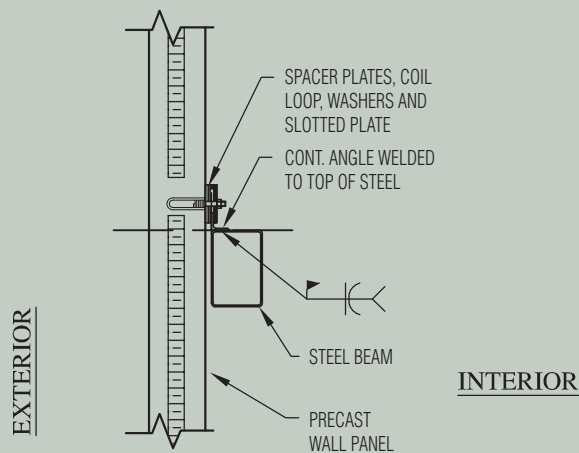
# Wall Panel Connection Details



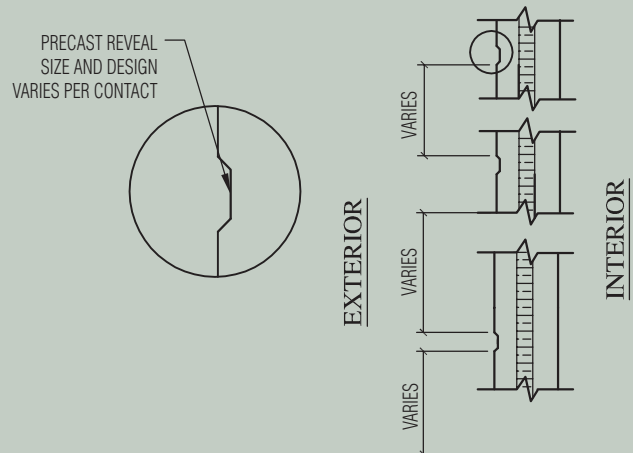
**WL19** Knife connection to beam



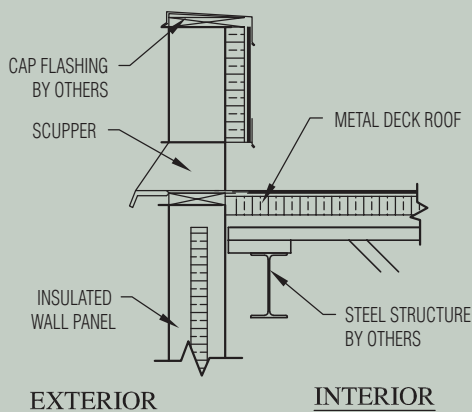
**WL20** Knife connection to ADJACENT PANEL



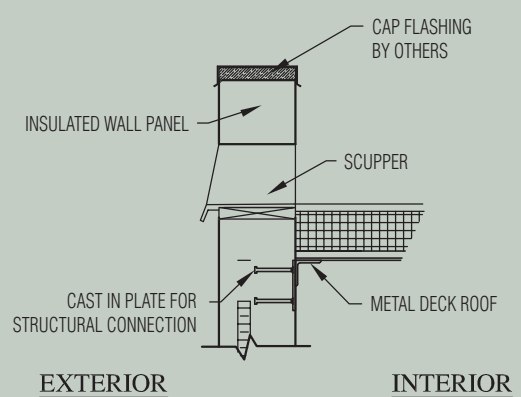
**WL21** Lateral connection @ hung panel



**WL22** Reveal locations and profile



**WL23** Scupper detail #1



**WL24** Scupper detail #2



# Wall Panel Specifications



## 1. General:

- a. Included:
  - i. Precast Wall Panels
    - 1. Architectural & Structural Panels.
    - 2. Sandwich & Cladding styles.
  - ii. Structural connections.
  - iii. Backer rod and caulking of panel joints.

## 2. Reference Material:

- a. CSA A23.4-09: Precast Concrete Material & Construction.
- b. Precast Concrete Institute (PCI): Manual on Design of Connections for Precast.
- c. Precast Concrete Institute (PCI): Design Handbook – Precast & Prestressed Concrete.

## 3. Shop Drawings:

- a. Approval drawings will require a review by the Contractor & Design Firms under contract of each project. Discrepancies, questions & verification of design is required and returned in writing prior to commencement of production.
- b. Production drawings will bear a signed and sealed Engineer stamp, slab locations, identification marks, connection details, dimensions, openings larger than 6" in size, loadings and other relative information.

## 4. Quality Assurance:

- a. Conformity to PCI manual on design of connection for Precast Prestressed Concrete, PCI Design Handbook – Precast & Prestressed Concrete, CSA A23.4.

## 5. Accessories:

- a. Shim pads: Plastic or steel to assist transfer of loads.
- b. Cast in inserts / plates or similar relevant to remainder of structure.
- c. Connections (i.e. knife, bolted, welded) between panel units.

## 6. Finishes:

- a. Steel form.
- b. Troweled.
- c. Sandblast.
- d. Ribbed pattern.
- e. Painted (with sand additive option).
- f. Exposed aggregate (vary with availability – contact Stubbes for current options).
- g. Colours (vary with availability – contact Stubbes for current options).

## 7. Installation:

- a. Install panels with corresponding identification mark as indicated on production / shop drawing.
- b. Ensure connections provided as detailed on production / shop drawing.
- c. Backer rod and caulking of joints between precast panels and foundation.

## 8. Excluded items related to precast and installation:

- a. Drypacking / infill of gap between precast and structure.
- b. Perimeter caulking between precast and structure (other than foundation).
- c. Winter heat / protection from weather conditions.
- d. Site / field dimensions (Contractor and Project Designers responsible to provide information during shop drawing approval).