

## **ITEMS OF INFORMATION – CLADDING**

(See ATMI's standard cladding details for more information)

### **Design Criteria**

- Building Code and fire Rating(s), if and where required
- Equivalent fluid pressure for precast walls below grade (e.g., dock walls) (in "dry condition" and in active state) along with surcharge Live Load on Slab-on-Grade
- Wind Loading for Cladding and Components
- Are Precast Wall Panels part of the lateral load resisting system?
  - ✓ If yes, to resist Seismic Loading, ATMI assumes/designs precast walls to be "Ordinary Precast Shear Walls" with a Seismic Response Modification Coefficient of R=3.
  - If no, provide the maximum in-plane horizontal deflections that must be accommodated at precast wall panel tie back to structure framing.

#### Architectural

- Assumed panel thickness, panelization (ATMI standard joint width is 1/2-inch) and panel finishes
- Typical panel widths are nomimal 14'-0" or 12'-0" wide panels
- 18-inch minimum jamb at openings required (minimum width from edge of panel to edge of any opening)
- Top and bottom of precast panel elevations (ATMI assumes 1-inch grout annular space between bottom of panel and top of footing/foundation)
- Expansion joints (EJ's should occur in wall panels where a roof EJ occurs; ATMI prefers roof EJ's align with wall
  panel joints; EJ width, anticipated in-plane and out-of-plane movements, and EJ material, are the
  responsibility of the AOR/EOR to design and detail).
- Scupper size and location, if required
- Reveal size and locations (ATMI standard reveal depth is 1/2-inch). Location of drips, wash, chamfers, etc.
- Rough opening sizes (windows, doors, dock doors, clerestory windows, etc.)
- Precast joints (butt, mitre, lapped, etc.) ATMI prefers butt or lapped precast joints.

#### Structural

- Foundation Plans/details with T/Foundation or T/Footing identified (i.e., bottom of panel) including steps in foundations.
- ATMI assumes all panels founded at -(3'-0") or greater will be tied back to SOG with floor ties. ATMI will
  provide floor tie loads for design of SOG by EOR.
- ATMI assumes that all panels will be braced by floor/roof structure behind the panel unless explicitly noted otherwise by the EOR on the drawings.
- Precast wall panels/spandrels lateral tie back connection details and gravity support details (see ATMI standard cladding details for more information).
- Provide all loads as Service Loads (or identify as ultimate loads)
- Lateral Loads to be resisted (if any) service level diaphragm shears due to wind and seismic, imposed on
  precast due (plf at all floors and roof)
  - ✓ Indicate whether or not seismic lateral loads noted take into account the weight of panels parallel to direction of seismic load
- Special Loads Provide DL, LL, N (axial tension), uplift (kips) for each condition:
  - ✓ Canopies; Awnings; Wind girts; and other structural elements attached to precast
  - ✓ Provide detail and galvanizing (or other protection) requirements
- Bottom of roof/floor deck and/or T/Steel elevations (ATMI prefers, and unless directed otherwise, bids and assumes constant elevation bottom of deck elevations)



# STANDARD SHOP DRAWING CLADDING DETAILS 05/26/2021

http://www.atmiprecast.com

960 RIDGEWAY AVE AURORA, IL 60506 630-896-4679

| XX    | STANDARD PANEL CROSS SECTIONS                    | 09/06/2018                         | D70     | 3/4" EDGE CHAMFER ON EACH FACE | 01/09/2017 |
|-------|--|------------------------------------|---------|--------------------------------|------------|
| D1A   | BASE CONNECTION AT TRENCH FTG                    | 5 01/28/2020                       | D71     | DRIP REVEAL                    | 01/09/2017 |
| D2    | BASE CONNECTION AT WIDE STEM W                   | ALL 2 01/28/2020                   | D72     | SILL WASH                      | 01/09/2017 |
| CD20A | PANEL TIE BACK CONN AT CONCRETE<br>SLAB          | 01/16/2019                         | D73     | PANEL JOINT                    | 01/09/2017 |
| CD20B | PANEL TIE BACK CONN AT CONCRETE<br>SLAB          | 01/16/2019                         | D74     | FIRE RATED PANEL JOINT         | 01/09/2017 |
| CD20C | PANEL TIE BACK CONN AT CONCRETE<br>SLAB          | 05/26/2021                         | D75     | REINFORCING AROUND OPENINGS    | 10/17/2018 |
| CD20D | PANEL TIE BACK CONN AT STEEL BEA<br>WITH KICKER  | M 05/26/2021                       |         |                                |            |
| CD21A | PANEL TIE BACK CONN TO<br>STEEL AT CONCRETE SLAB | 01/16/2019                         |         |                                |            |
| CD21B | PANEL TIE BACK CONN TO STEEL<br>AT CONCRETE SLAB | 01/16/2019                         |         |                                |            |
| CD25  | STACKED PANELS CONN                              | 01/16/2019                         |         |                                |            |
| CD30A | PANEL TIE BACK CONN AT STEEL DEC                 | CK 01/16/2019                      |         |                                |            |
| CD30B | PANEL TIE BACK CONN AT STEEL DEC                 | CK 01/16/2019                      |         |                                |            |
| CD35A | PANEL TIE BACK CONN AT STEEL DEC                 | CK 01/16/2019                      |         |                                |            |
| CD35B | PANEL TIE BACK CONN AT STEEL DEC                 | CK 01/16/2019                      |         |                                |            |
| CD40A | PANEL TIE BACK CONN AT GIRT                      | 01/16/2019                         |         |                                |            |
| CD40B | PANEL TIE BACK CONN AT GIRT                      | 01/16/2019                         |         |                                |            |
| D44   | ALIGNMENT/SHEAR CONNECTION                       | 1 10/04/2019                       |         |                                |            |
| D45   | EXPANSION JOINT ALIGNMENT<br>CONNECTION          | 2 01/28/2020                       |         |                                |            |
| D46   | PANEL CONNECTION                                 | 1 01/28/2020                       |         |                                |            |
| D47   | SHEAR CONNECTION                                 | 1 10/28/2019                       |         |                                |            |
| D48   | TEMPORARY PANEL ALIGNMENT<br>CONNECTION          | 1 03/01/2017                       |         |                                |            |
| CD50  | MITER CORNER                                     | 01/09/2017                         |         |                                |            |
| CD51A | OUTSIDE BUTT CORNER (ARCH FINISI                 | H) 01/16/2019                      |         |                                |            |
| D52   | INSIDE BUTT CORNER                               | 01/09/2017                         |         |                                |            |
| D53   | OVERLAP CORNER                                   | 01/09/2017                         |         |                                |            |
| D60   | SPANDREL SUPPORT                                 | 11/14/2017                         |         |                                |            |
| D62A  | SPANDREL TO STEEL COLUMN                         | 12/11/2018                         |         |                                |            |
| D62C  | SPANDREL TO STEEL COLUMN                         | 12/11/2018                         |         |                                |            |
| D63A  | SPANDREL TO COLUMN - JOINT                       | 12/11/2018                         |         |                                |            |
| D63C  | SPANDREL TO COLUMN - JOINT                       | 12/11/2018                         |         |                                |            |
| D66   | VERTICAL/HORIZONTAL REVEAL                       | 01/09/2017                         |         |                                |            |
| D67   | CAULK CORNER                                     | 01/09/2017                         |         |                                |            |
| D68   | 1/2" EDGE CHAMFER                                | 01/09/2017                         |         |                                |            |
|       |  | TABLE OF                           | CONTENT | S                              | BY: ATMI   |
|       | Ruilding Propert Solutions                       | PROJECT: STANDARD CLADDING DETAILS |         |                                |            |
|       | Building Precast Solutions                       | ISSUED: 05/26/2021 REVISED: 0      |         |                                |            |





NOTE:

ATMI RECOMMENDS ADDING CHAMFERED EDGE TO THE OUTSIDE FACE TOP EDGE OF STEM WALLS TO REDUCE CHIPPING & SPALLING DURING TYPICAL PRECAST ERECTION.































|                            | TITLE:  | SHOP DRAWING DET | AILS |            | BY: | ATMI |
|----------------------------|---------|------------------|------|------------|-----|------|
| AT MIPrecast               | PROJECT | STANDARDS        |      |            |     |      |
| Building Frecast Solutions | ISSUED: | 01/09/2017       |      | 10/04/2019 |     | D44  |

| EXPANSION JOIN<br>D45<br>SCALE: 3/4" = 1'-0" | TION, TYP<br>6" SOLID ALONG ENTIRE<br>PANEL EDGE AT EJ |          |
|--|--|----------|
| <b>ATMIPrecast</b>                           | TITLE: SHOP DRAWING DETAILS<br>PROJECT: STANDARDS      | BY: ATMI |
| Building Precast Solutions                   | ISSUED: 03/03/2017 REVISED: 12/08/201                  | 7 D45    |



EJ

1'-8" SOLID

DO NOT WELD EITHER PLATE ON BOTH SIDES OF THE JOINT.

NOTES: STANDARD DETAIL ALLOWS FOR MAXIMUM 3" EXPANSION JOINT.







| EMBED | DESCRIPTION                            |
|-------|--|
| P-13  | L2"x2"x1/4"x1'-0" w/ (4) 1/2"Øx24" DBA |
| E-49  | PL1/2" x 1 1/4" x 0'-6"                |

|                            | TITLE:  | SHOP DRAWING DETAILS |                                   | BY: | ATMI |
|----------------------------|---------|----------------------|-----------------------------------|-----|------|
| Ruilding Procest Solutions | PROJECT | STANDARDS            |                                   |     |      |
|                            | ISSUED: | 01/09/2017 REVISED   | <sup>D:</sup> <u>1</u> 10/28/2019 |     | D47  |



























| (D69) 3/4" EDGE CHAN<br>SCALE: 1 1/2" = 1'-0" | AFER_      |        |
|---|------------|--------|
| <b>ATMI</b> Precast                           |            |        |
| Building Precast Solutions                    |            | -  D69 |
|   | 01/03/2017 | ~ ~ ~  |

|   | 6"  |             |
|---|---|-------------|
|   | INSULATION<br>HOLD AT<br>EXPOSED EDGES  |             |
| D70 3/4" EDGE CHAN<br>SCALE: 1 1/2" = 1'-0" | MFER ON EACH FACE   |             |
| AT MIPrecast<br>Building Precast Solutions  | TITLE:       SHOP DRAWING DETAILS         PROJECT:       STANDARDS         ISSUED:       01/09/2017 | АТМІ<br>D70 |









