DESIGN LOADS:
Vertical leg and provide minimum 8" support each end.

LATERAL LOADS:
The contractor shall verify all dimensions and existing conditions in the field that affect construction prior to
Exterior slabs 24 times slab thickness, maximum; Interior slabs 36 times slab thickness, maximum; Interior slabs 48 times slab thickness, maximum, with carpeting

Structural panels formed by control or construction joints shall not be "L" shaped and a rectangular panel’s aspect ratio

Refer to drawings for reinforcing at re-entrant corners. Bend bars as necessary at obstructions.

Ground Snow Load, Pg: 60 psf Flat-Roof Snow Load, Pf: 42 psf Snow Exposure Factor, Ce: 0.70 Snow Load Importance Factor, I: 1.1 Unbalanced/Drift Snow Load: Refer to plan, UNO

Refer to the specification for acceptable methods of curing the concrete.

For future Mechanical and Electrical Units:
Minimum embedment depths in concrete and concrete masonry for expansion and adhesive anchors shall be

For 1/2", 5/8", and 3/4" diameter expansion anchors provide 4 3/4"embed, UNO on plan.

Provide concrete cover of minimum 1/2" to face shell.

Grout masonry beams solid. Mechanically vibrate grout in place.

Provide steel deck spanning a minimum of three spans, unless otherwise approved by the engineer. Deck ends

Grout, mats, and slabs after 72 hours and for 28 days, minimum. Grout, mats, and slabs after 72 hours and for 28 days, minimum.

Provision for future expansion:
Provide concrete cover of minimum 1/2" to face shell.

Provide weldable 60,000 psi ASTM A706 Grade 60 steel stud framing for the units locations, sizes, and weights. Future Mechanical and Electrical Units:

For vertical reinforcing from footings to 2" clear top of wall or to beam bearing. Extend vertical reinforcing into the

Sheets shall be epoxy coated or plastic and all support bars shall be epoxy coated. Chairs are to be stable and resist

Grout masonry beams solid. Mechanically vibrate grout in place.

Provide cold-formed steel sections and cold-formed light gauge metal framing as specified in the drawings to resist

For placing of concrete to allow

Such inspections shall be performed at least once every 72 hours and for 28 days, minimum.

Concrete connections shall be welded using the butt welding process. The welds shall be full penetration welds.

Horizontal reinforcing in masonry beams shall be pre-cast lintel blocks. Masonry beams are to bear 8" minimum at jambs. Extend vertical reinforcing through masonry bearing.

Provide 7" embed, UNO on plan.

For 1/2", 5/8", and 3/4" diameter expansion anchors provide 4 3/4" embed, UNO on plan.

Provide adhesives to be in the products ACR Report.

For the units locations, sizes, and weights. Future Mechanical and Electrical Units:

Provide cold-formed steel sections and cold-formed light gauge metal framing as specified in the drawings to resist

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For 1/2", 5/8", and 3/4" diameter expansion anchors provide 4 3/4" embed, UNO on plan.

Provide adhesives to be in the products ACR Report.
## Steel Deck Information

- **Non-composite Steel Floor Deck:**
  - Manufacturer shall be a current member of the Steel Deck Institute (SDI).
  - Non-composite steel floor deck shall be as noted on the plan.

- **Reynolds, Smith and Hills, Inc.:**
  - Detail, manufacture and install non-composite steel floor deck and accessories in accordance with the SDI specifications and codes and OSHA steel erection standards.
  - Refer to drawings for non-composite steel floor deck fastening requirements. Powder actuated or pneumatically driven fasteners are not allowed. Where spray-on fireproofing of the deck is required, the contractor shall verify that the deck finish is compatible with the proposed fireproofing material to ensure proper bonding of the material.
  - Coordinate locations and requirements with the architect. Provide reinforcement or frames for deck openings as indicated on the drawings.

## Light Gauge Metal Framing

- **Headers, Jambs, Joists, Rafters and Anchorage:**
  - Headers, jambs, joists, rafters and anchorage shall be by the Light Gauge Supplier.
  - Studs in exterior walls shall be minimum 600S162-43 (6"-18 gauge) studs at 16" OC.
  - At all openings in exterior and bearing walls provide a minimum two studs full wall height each side of opening plus minimum one additional stud each side for lintel bearing.
  - Top and bottom tracks shall be cold rolled or break-formed steel, galvanized U shaped and minimum 18 gauge and as noted on the drawings.
  - Light gauge metal framing fasteners shall be minimum #10 self-drilling sheet metal screws, 16 threads otherwise. Fasten light gauge framing to wood with minimum #10 x 1 7/8" bugle head wood screws. Pre-drill holes.
  - Light gauge material to be welded must be nominal 16 gauge or thicker.
  - Welders shall be qualified in accordance with AWS D 1.3 and shall be experienced in light gage welding.

## Special Inspection Schedule

### Special Inspection Required of Structural Elements

<table>
<thead>
<tr>
<th>Description</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete</td>
<td>Review by Contractor, approved by Architect.</td>
</tr>
<tr>
<td>Steel</td>
<td>Review by Contractor, approved by Architect.</td>
</tr>
<tr>
<td>Wood</td>
<td>Review by Contractor, approved by Architect.</td>
</tr>
<tr>
<td>Pile Foundations</td>
<td>Review by Contractor, approved by Architect.</td>
</tr>
<tr>
<td>Veneers</td>
<td>Review by Contractor, approved by Architect.</td>
</tr>
<tr>
<td>Fire-Resistant Materials</td>
<td>Review by Contractor, approved by Architect.</td>
</tr>
</tbody>
</table>

### Non-Construction

- 30% Not for Construction

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### Table 1704.3

<table>
<thead>
<tr>
<th>Special Inspection</th>
<th>Remarks</th>
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<tbody>
<tr>
<td>1.1 Welding</td>
<td>Review by Contractor, approved by Architect.</td>
</tr>
<tr>
<td>1.2 Details</td>
<td>Review by Contractor, approved by Architect.</td>
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<tr>
<td>2. Concrete</td>
<td>Review by Contractor, approved by Architect.</td>
</tr>
<tr>
<td>2.1 Forms</td>
<td>Review by Contractor, approved by Architect.</td>
</tr>
<tr>
<td>2.2 Reinforcing steel</td>
<td>Review by Contractor, approved by Architect.</td>
</tr>
<tr>
<td>2.3 Placement</td>
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</tr>
<tr>
<td>2.4 Compaction</td>
<td>Review by Contractor, approved by Architect.</td>
</tr>
<tr>
<td>3.1 Level 1 Special Inspection</td>
<td>Review by Contractor, approved by Architect.</td>
</tr>
<tr>
<td>3.2 Level 2 Special Inspection</td>
<td>Review by Contractor, approved by Architect.</td>
</tr>
<tr>
<td>8. Wall Panel and Veneers</td>
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</tr>
<tr>
<td>11. Special Cases</td>
<td>Review by Contractor, approved by Architect.</td>
</tr>
</tbody>
</table>

### General Structural Notes

- 30% Not for Construction
BF1 - BRACING AT GRID "2"/"1.3"

BF2 - BRACING AT GRID "4"

BF3 - BRACING AT GRID "8"

BF4 - BRACING AT GRID "10"

BF5 - BRACING AT GRID "E"

BF6 - BRACING AT GRID "G"

1/8" = 1'-0"
1. CONTRACTOR/FABRICATOR SHALL DESIGN TYPICAL SHEAR CONNECTIONS FOR THIS PROJECT. CONNECTION TYPES SHALL CONFORM TO:

2. PROVIDE BEAM CONNECTIONS FOR END REACTIONS INDICATED ABOVE OR AS SHOWN ON PLAN OR DETAIL, WHICHEVER IS GREATER.

3. CONCRETE TOPPING THICKNESS IS FROM TOP OF DECK TO TOP OF CONCRETE.

4. BEAM TO BEAM CONNECTIONS MAY BE SINGLE OR DOUBLE SHEAR, AS REQUIRED TO PROVIDE THE SPECIFIED CONNECTION CAPACITY WITHIN THE AVAILABLE CONNECTION GEOMETRY. ALL BEAM TO COLUMN CONNECTIONS SHALL BE DOUBLE SHEAR.

5. ALL BOLTS SHALL BE MINIMUM 3/4" DIAMETER A325-N, UNLESS NOTED OTHERWISE.

6. SEE SPECIFICATIONS FOR SYNTHETIC FIBERS.

7. ALL COMPOSITE DECK IS GALVANIZED. REFER TO SPECIFICATIONS FOR ROOF DECK FINISH.

8. VERIFY OPENING DIMENSIONS WITH ARCHITECTURAL DRAWINGS AND MECHANICAL TRADES.

9. BLOCK OUT FOR OPENING THROUGH CONCRETE SLAB OVER METAL DECK

10. PLAN

11. STRUCTURAL DETAILS

12. 30% NOT FOR CONSTRUCTION

S701

BEAM SHEAR CONNECTION SCHEDULE

FOR BEAMS SUPPORTING OTHER BEAMS

<table>
<thead>
<tr>
<th>SIZE</th>
<th>MIN ROWS</th>
<th>FOR BEAMS SUPPORTING DECK ONLY</th>
<th>FOR BEAMS SUPPORTING OTHER BEAMS</th>
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<tbody>
<tr>
<td>1&quot;</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>1 1/2&quot;</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2&quot;</td>
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<tr>
<td>4&quot;</td>
<td>7</td>
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</table>

BEAM SHEAR CONNECTION SCHEDULE

FOR DECK ATTACHMENT

<table>
<thead>
<tr>
<th>DECK SUPPORT CONDITION</th>
<th>DECK ATTACHMENT</th>
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<tbody>
<tr>
<td>END SUPPORT</td>
<td>SIDE LAP JOINT</td>
</tr>
<tr>
<td>INTERMEDIATE SUPPORT</td>
<td>OVER METAL DECK</td>
</tr>
<tr>
<td>END SUPPORT</td>
<td>OVER METAL DECK</td>
</tr>
</tbody>
</table>

FLOOR AND ROOF DECK SCHEDULE

<table>
<thead>
<tr>
<th>DECK TYPE</th>
<th>CONCRETE TOPPING</th>
<th>DECK ATTACHMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLOOR &amp; ROOF DECK</td>
<td>5.0 LBS/CU YD</td>
<td>SIDE LAP JOINT</td>
</tr>
</tbody>
</table>

TYPICAL FLOOR OPENING FRAME (OVER 32")

TYPICAL ROOF OPENING FRAME (OVER 32")

TYPICAL SECTION AT COMPOSITE DECK PERPENDICULAR TO BEAM

TYPICAL SECTION AT COMPOSITE DECK PARALLEL TO BEAM
PLACE STUDS IN THE PORTION OF DECK RIB CLOSEST TO THE BEAM END WHEN POSSIBLE.

1. USE ONLY ONE STUD PER RIB UNTIL NUMBERS OF STUDS EXCEEDS DECK RIBS AVAILABLE. LOCATE SINGLE STUDS OVER WEB.

2. PROVIDE ADDITIONAL STUDS BEYOND NUMBER NOTED ON PLANS OR SCHEDULES TO MEET MAXIMUM STUD SPACING SHOWN.

3. PROVIDE STUDS IN DOUBLE OR TRIPLE CONFIGURATION SHOWN TO MEET TOTAL NUMBER OF STUDS REQUIRED. START LAYOUT OF DOUBLE/TRIPLE STUDS AT EACH END OF BEAM. DOUBLE/TRIPLE STUD LAYOUTS SHALL ONLY BE USED FOR BEAMS WITH MINIMUM FLANGE WIDTHS SHOWN.

4. PROVIDE STUDS IN THE PORTION OF DECK RIB CLOSEST TO THE BEAM END.

NOTES:

1. TRIPLE STUDS NOT PERMITTED.

2. FOR "E" GREATER THAN 6" BUT LESS THAN 12", PROVIDE 1/4" BENT PLATE WITH 3/4" DIA x 5" HEADED STUDS AT 24" OC.

3. PROVIDE STUDS IN DOUBLE OR TRIPLE CONFIGURATION SHOWN TO MEET TOTAL NUMBER OF STUDS REQUIRED. START LAYOUT OF DOUBLE/TRIPLE STUDS AT EACH END OF BEAM. DOUBLE/TRIPLE STUD LAYOUTS SHALL ONLY BE USED FOR BEAMS WITH MINIMUM FLANGE WIDTHS SHOWN.

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