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REVIEWED IN ACCORDANCE WITH THE REQUIREMENTS OF T24, COR
THE REQUIREMENTS OF T24, COR
APPROVED
APPROVED
Office of statewide Health Planning & Development
FACILITIES DEVELOPMENT DIVISION

CODE:
2010 CBC

SECTION TITLE:
STANDARD PARTITION WALL DETAILS

SHEET TITLE:
DRAWING INDEX (CONTINUED)

ISSUE DATE: 01/06/12
STX.01

REVISION:
DATE:
OPD NO.
NARRATIVE

2010 California Building Code (2010 CBC) Standard Partition Wall Details document contains OSHPD Pre-Approved Details (OPD), which may be incorporated into construction documents. These details have been reviewed for compliance with the 2010 CBC and, when used as shown, without modifications, are deemed to comply with code. They are intended to cover common conditions that occur on many projects. It is anticipated that use of these details will facilitate the design, review, and construction process.

The Narrative and supporting Flowchart, which follows the Narrative, are provided to assist in selecting applicable details from the OPD for incorporation into the construction documents. It is to be used only as a guide and does not provide complete step-by-step instructions for use of the OPD. Narrative comment numbers correspond to the numbered items on the Flowchart.

The following steps apply to use of OPD:

1. Define Project Parameters
   
   A. Short Period Spectral Response Acceleration ($S_{sp}$) for project site.
      
      i. The ($S_{sp}$) identified for use with the OPD shall not be lower than the $S_{sp}$ documented in the project General Notes and/or Specifications.
   
   B. Type of construction.
      
      i. The Registered Design Professional (RDP) in responsible charge shall identify the floor and/or roof framing materials which apply to the use of the OPD under consideration (e.g. wood, concrete, metal deck).
   
   C. Project specific geometry and other conditions.
      
      i. The RDP in responsible charge shall identify the geometry which applies to the use of the OPD under consideration (e.g. floor-to-floor height, wall thickness).
      
      ii. The RDP in responsible charge shall identify other unique conditions which apply to the use of the OPD under consideration (e.g. mechanical duct conflicts, door openings in partition walls, partial-height vs full-height partition walls, attachments suspended from partition walls).

2. Verify Applicability of OPD
   
   Refer to PIN 51.

OPD allow design professionals to incorporate pre-approved details into their construction documents. Projects that utilize OPD shall satisfy the following conditions.
A. The RDP in responsible charge shall verify the applicability of the OPD for their specific project conditions. For example, when designing a fire-rated corridor, use of partition wall framing OPD are acceptable provided the OPD are compatible with the construction requirements for the fire rated wall assembly.

B. The details must be directly applicable to the project conditions. For example, OPD for attachment of a soffit suspended below a steel deck with concrete fill are not applicable to wood frame construction.

C. Substitutions of items shown in the OPD are not permitted, unless specifically allowed by the OPD. For example, a power-actuated fastener (PAF) may not be substituted in a connection detail that specifies an expansion anchor, unless the OPD specifically permits it. Use of post-installed anchors from different manufacturers is permitted, provided the substituted anchors meet the installation criteria and Allowable Strengths as specified in the OPD.

D. Changes to the OPD to accommodate project conditions are not permitted. In such cases, project specific details are required.

3. Select Appropriate Details from OPD

Review OPD General Notes before the start of OPD selection process.

A. For partition wall design, begin at ST2.00.

B. Enter ST2.01 with partition wall height, condition and $S_{02}$ value to select metal stud size.

C. The following framing components are covered by the OPD:
Furring, attachment anchorage to the partition walls, framing of openings (3.D), lateral in-plane bracing of the partition walls, partition wall top and bottom connections to structure (3.E). See flowchart for corresponding detail numbers.

D. Framing of openings.
   i. Select opening framing members per ST3.00 or ST3.01 based upon opening width per ST2.06.
   ii. Apply the information found in these schedules to select appropriate framing details.
      1) Header detail ST3.02 provides a choice of screw or welded connections.
      2) Sill detail ST3.03 provides a choice of screw or welded connections.
      3) Jamb detail ST3.04 provides a choice of screw or welded connections.
         a) See ST2.06 and ST7.10 for top track connection at jambs.
         b) See ST8.05 for fasteners for bottom connection at jambs based on opening size and the substrate below.
4) Depending upon the opening width, use header and sill connection to jamb per ST3.05 or ST3.06, both of which provide options for bent web or gage plate connections.

E. Partition wall connection to structure.

i. Partition wall top connection design.

1) For partial height partition top connection, brace design begins at ST6.00.
   a) For brace spacing size and connections at either end of the brace, enter schedule on ST6.01 with SDR and partition wall condition information. Determine maximum allowable brace spacing based on the chosen brace size (stud width and thickness).
   b) For brace configuration and components, see ST6.02 and ST6.03.
   c) Brace connection to the structure above is specific to the construction type (e.g. substrate for fastener placement). See ST6.04 through ST6.10.
   d) Select appropriate fastener.
   e) For fasteners installed in concrete or steel choose qualified fastener manufacturer based on fastener installation criteria and Allowable Strength as specified in the OPD as well as criteria specified in the General Notes.
   f) For fasteners installed in wood, use fasteners per NDS for Wood Construction.

2) For full height partition wall, top connection design begins at ST7.00.
   a) For nested and vertically slotted track configurations, see ST7.01.
   b) Top track connection to the structure above is specific to the construction type (e.g. substrate for fastener placement). See ST7.02 through ST7.10.
   c) See 3.E.i.1(d) for further steps.

ii. For partition wall bottom connection, design begins at ST8.00.
   1) For connection to concrete, see ST8.01.
      a) To select fastener type, size, embed and spacing for connection to LWC filled metal deck or NWC slab, enter schedule on ST8.02 or ST8.03 with partition wall condition, height and SDR information.
   2) For connection to wood, see ST8.04.
F. For soffit design, begin at ST9.00.
   i. See soffit framing on ST9.01 for framing elements specific to $S_{PC}$ level and soffit lateral brace length.
   ii. Depending on the substrate, use ST9.02 or ST9.03 for the soffit connection to the structure above.

1) Choose qualified manufacturer based on fastener installation criteria and Allowable Strengths as specified in the OPD as well as criteria specified in the General Notes. See ST1.03 and ST1.04 in addition to OPD General Notes.

4. Implementation and Use of OPD During Plan Review
   Refer to PIN S1.

5. Implementation and Use of OPD During Construction Process
   Refer to PIN S1.

   A. During construction, OPD are treated as any other detail in the approved documents.

   B. Pre-approved details submitted after the construction documents have been approved and a building permit has been issued shall be used and/or processed in accordance with Code Application Notice 2-107.4 "Amended Construction Documents." Pre-approved details may be applied as alternates to the approved details shown on the permitted construction documents only on a one-for-one basis and with written consent of the registered design professional and the registered design professional in responsible charge and in concurrence with OSHPD field staff. Pre-approved details will not be subject to additional plan review provided they are incorporated without any modification. Pre-approved details are subject to field confirmation during which the applicability of pre-approved details for specific project conditions shall be evaluated.

   C. Changing the scope of a project (adding additional partition walls, for example) does constitute a material alteration to the project, even if OPD can be used for all conditions. In such a case, an Amended Construction Document must be submitted to OSHPD field staff for review.
3. Connection to Concrete (ST8.01)

   - PAF
   - Expansion Anchors
   - Screw Anchors

3.1 Connection to Concrete (ST8.01)

   - PAF Size, Embed, Spacing (ST8.02-ST8.03)
   - Expansion Anchor Size, Embed, Spacing (ST8.02-ST8.03)
   - Screw Anchor Size, Embed, Spacing (ST8.02-ST8.03)

3.2 Connection to Wood (ST8.04)

   - Fasteners per NDS for Wood Construction

See Step 4 on STX.06

PAF General Notes and Allowable Stresses (ST1.01-ST1.02)

Expansion Anchor General Notes and Allowable Stresses (ST1.03-ST1.04)

Screw Anchor General Notes and Allowable Stresses (ST1.09-ST1.10)

Selection of Qualified PAF Manufacturer (OPD General Notes)

Selection of Qualified Expansion Anchor Manufacturer (OPD General Notes)

Selection of Qualified Screw Anchor Manufacturer (OPD General Notes)

Continued from STX.07

3. E.ii

Bottom Connection (ST8.00)
3. F.
   Soffit Design
   (ST9.00)

3. F.i
   Soffit Framing
   Details
   (ST9.01)

3. F.ii
   Soffit Connection to
   Concrete Substrate
   (ST6.02)

3. F.ii
   Soffit Connection to Steel
   Substrate
   (ST9.03)

3. F.ii.1
   Fastener General Notes and
   Allowable Strengths
   (ST1.03-ST1.04, ST1.06-
   ST1.08)

Selection of Qualified
Fastener Manufacturer
(OPD General Notes)

See Step 4
on STX.48
GENERAL NOTES

1. CONSTRUCTION, WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE 2010 CALIFORNIA BUILDING STANDARDS CODE (2010 CBC), CALIFORNIA CODE OF REGULATIONS, TITLE 24, AND ASCE 7-05.


3. THE INTENT OF THE OPD IS TO CONSTRUCT THE HOSPITAL BUILDING IN ACCORDANCE WITH THE 2010 CBC, CALIFORNIA CODE OF REGULATIONS, TITLE 24. SHOULD ANY CONDITION DEVELOP NOT COVERED BY THE APPROVED PLANS AND SPECIFICATIONS WHEREIN THE WORK WILL NOT COMPLY WITH THE 2010 CBC, A CHANGE ORDER DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY OSHPD BEFORE PROCEEDING WITH THE WORK.

4. GALVANIZED METAL STUDS, TRACKS AND SHEET STEEL SHALL CONFORM TO ASTM A653 MATERIAL, OR OTHER EQUIVALENT ASTM LISTED MATERIALS IN SECTION A2.1 OF THE AISI S100-07/52-10: NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, WITH SUPPLEMENT 2, DATED 2010. WITH A MINIMUM YIELD STRENGTH OF 33 KSI FOR 43 MIL (18 GAGE) AND LIGHTER AND MINIMUM YIELD STRENGTH OF 59 KSI FOR HEAVIER GAGES.

5. METAL STUDS AND TRACKS SHALL BE OF SIZE, THICKNESS AND SECTION PROPERTIES SHOWN ON TABLES 1-1, 1-2 AND 1-3 OF THE AISI MANUAL, COLD-FORMED STEEL DESIGN, 2008 EDITION. THE RDP IN RESPONSIBLE CHARGE SHALL OBTAIN OSHPD APPROVAL FOR ANY SUBSTITUTIONS.

6. THESE OPD REFER TO FASTENER TYPE AND SIZE BUT DO NOT SPECIFY OR ENDORSE A SPECIFIC MANUFACTURER. THE RDP IN RESPONSIBLE CHARGE SHALL SELECT A MANUFACTURER, AND SELECTED FASTENER CAPACITIES SHALL MATCH OR EXCEED THE ALLOWABLE STRENGTHS LISTED HEREIN. THE FOLLOWING REQUIREMENTS SHALL ALSO BE MET:

A. SHEET METAL SCREWS SHALL COMPLY WITH ASTM C 1513-04, ASME B18.6.4-98 AND ICC-ES AC 118 AND ALLOWABLE STRENGTH SHALL BE BASED ON INFORMATION PROVIDED IN ST1.07 AND ST.1.08. PENETRATION OF SCREWS THROUGH JOINED MATERIAL SHALL NOT BE LESS THAN THREE EXPOSED THREADS.

B. WELDING SHALL BE IN ACCORDANCE WITH AWS D1.3 USING E60XX SERIES ELECTRODES. FIELD WELDING SHALL HAVE SPECIAL INSPECTION IN ACCORDANCE WITH 2010 CBC 1704A.3.

D. POWER-ACTUATED FASTENERS (PAF), POWDER DRIVEN FASTENERS (PDF), POWER DRIVEN PINS (PDP) AND SHOT PINS ALL REPRESENT THE SAME DEVICE AND WILL HEREAFTER BE REFERRED TO AS POWER ACTUATED FASTENERS (PAF). PAF SHALL SATISFY THE CURRENT ACCEPTANCE CRITERIA FOR FASTENERS POWER-DRIVEN INTO CONCRETE, STEEL AND MASONRY ELEMENTS AND THE 2010 CBC SECTIONS 1615A.1.15 AND 1911A.1.1. LISTING OF CURRENT ICC-ES EVALUATION REPORTS (OR REPORTS FROM OTHER TESTING AGENCIES ACCEPTABLE TO OSHPD) SHALL BE REQUIRED FOR FASTENERS USED.

E. FOR PAF INSTALLED IN STEEL THE FASTENER PENETRATION SHALL HAVE THE ENTIRE POINTED END OF THE FASTENER DRIVEN THROUGH THE STEEL MEMBER, EXCEPT AS NOTED IN CURRENT REPORTS FROM TESTING AGENCIES ACCEPTABLE TO OSHPD.

7. DESIGN CRITERIA

A. CODE: CALIFORNIA CODE OF REGULATIONS, TITLE 24, ASCE 7-05, AISI S100-07/52-10, AISI S211-07 WALL STUD DESIGN AND AISI S212-07 FOR HEADER DESIGN.

B. LOAD COMBINATIONS: ALLOWABLE STRESS DESIGN IN ACCORDANCE WITH 2010 CBC SECTION 1605A.3.1.

C. SYSTEM WEIGHTS:

- PARTITION WALLS = 7.5 PSF (INCLUDES METAL STUDS, TWO LAYERS OF GYP BOARD, TWO LAYERS ON ONE SIDE OR ONE LAYER ON BOTH SIDES, AND 1 PSF FOR INSULATION AND FINISHES)
- SOFFITS = 10 PSF (INCLUDES METAL STUDS, TWO LAYERS OF GYP BOARD, TWO LAYERS ON ONE SIDE OR ONE LAYER ON BOTH SIDES, AND 3.5 PSF FOR INSULATION, FINISHES AND MINOR FIXTURES)
- DOORS AND WINDOWS = 10 PSF
- CABINETS = 38 PCF (INCLUDES CONTENTS AT 33 PCF PER 2010 CBC TABLE 1607A.1 AND CABINET SELF WEIGHT OF 5 PCF)
- EQUIPMENT = 38 PCF (EQUIPMENT LOAD IS ASSUMED TO BE THE SAME AS CABINET LOAD)
D. SEISMIC COEFFICIENTS:

\[ a_s = 1.0 \text{ (ASCE 7-05, TABLE 13.5-1, CEILINGS, PARTITIONS, CABINETS, ETC.)} \]

\[ R_s = 2.5 \text{ (ASCE 7-05, TABLE 13.5-1, CEILINGS, PARTITIONS, CABINETS, ETC.)} \]

\[ I_p = 1.5 \text{ (ASCE 7-05, SECTION 13.3.1)} \]

\[ z/h = 1.0 \text{ (allows for installation at any floor or roof level of the building)} \]

\[ F_r = \text{larger of} \ 5 \text{ PSF in accordance with 2010 CBC Section 1607A.13 or seismic design force in accordance with ASCE 7-05 Section 13.3.1)} \]

\[ F_r = 0.25 S_o D \text{ (ASCE 7-05, SECTION 13.3.1), applied concurrently with} F_r \]

\[ \rho = 1.0 \text{ (ASCE 7-05, SECTION 13.3.1)} \]

\[ \Delta_o \text{ – does not apply (ASCE 7-05, SECTION 13.3.1)} \]

\[ S_{lo} \text{ – where limiting} S_{lo} \text{ values are not explicitly noted in the OPD, framing system or component shown in the OPD has been designed to accommodate all} S_{lo} \text{ values up to} 1.95 \]

E. DEFORMATION LIMIT = U/120 (2010 CBC TABLE 1604A.3, INTERIOR PARTITION WALLS WITH FLEXIBLE FINISHES). NOT PERMITTED FOR INTERIOR PARTITION WALLS WITH BRITTLE FINISHES.

F. FASTENER ALLOWABLE STRENGTH TABLES WERE DEVELOPED BASED ON ICC REPORTS BY MULTIPLE MANUFACTURERS.

G. THE OPD DESIGN ASSUMES THAT STRUCTURAL ELEMENTS AND SUPPORTS TO WHICH THE COMPONENTS ARE ANCHORED HAVE SUFFICIENT CAPACITY TO CARRY THE LOADS IMPOSED BY THE COMPONENTS IN COMBINATION WITH ALL OTHER LOADS. EVALUATION OF THE CAPACITY OF THESE SUPPORTING STRUCTURAL ELEMENTS IS BEYOND THE SCOPE OF THE OPD.

H. LG BEAMER 8.10 SOFTWARE WAS USED FOR STUD CAPACITY CHECK. THIS SOFTWARE USES AISI S100-07/S2-10 AS THE BASIS FOR SECTION PROPERTY CALCULATIONS AND INTERACTION CHECKS.

8. THE RDP IN RESPONSIBLE CHARGE SHALL VERIFY FIRE RESISTIVE AND ACoustical RATINGS FOR ALL PARTITION WALL ASSEMBLIES.

9. INDIVIDUAL DETAILS WITHIN THIS OPD TYPICALLY RELY UPON OTHER DETAILS FOR INFORMATION ESSENTIAL TO THEIR APPLICATION. OPD ARE TO BE USED IN CONJUNCTION WITH ALL RELATED, APPLICABLE DETAILS WITHIN THIS OPD PACKAGE INCLUDING THE GENERAL NOTES.

10. OPD PROVIDE OPTIONS FOR COMPONENTS SUCH AS STUD SIZES, BRACES SIZES, FASTENERS, ETC. THE RDP IN RESPONSIBLE CHARGE SHALL CLEARLY IDENTIFY ALL COMPONENTS SELECTED FOR USE IN THE PROJECT-SPECIFIC CONDITIONS.
**STRUCTURAL STUD ("S"-SECTIONS)**

**STRUCTURAL TRACK ("T"-SECTIONS)**

* - DEEP LEG TRACK (WHERE OCCURS AS NOTED IN DETAILS)

<table>
<thead>
<tr>
<th>DESIGNATION THICKNESS (WILS)</th>
<th>REFERENCE ONLY GAUGE NO.</th>
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<td>18</td>
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<td>27</td>
<td>22</td>
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<td>33</td>
<td>20</td>
</tr>
<tr>
<td>43</td>
<td>18</td>
</tr>
<tr>
<td>54</td>
<td>16</td>
</tr>
<tr>
<td>68</td>
<td>14</td>
</tr>
<tr>
<td>97</td>
<td>12</td>
</tr>
<tr>
<td>118</td>
<td>10</td>
</tr>
</tbody>
</table>

**NOTES:**
1. SEE WALL STUD FRAMING SECTIONS FOR THICKNESS OF STUDS & TRACKS.
2. Fy = 50KSI FOR 54 MIL (16GA) & THICKER SECTIONS, AND Fy = 33KSI FOR SECTIONS UP TO & INCLUDING 43 MIL (18GA).
3. SIZES AND THICKNESS ARE CONSIDERED MINIMUMS.
4. STRUCTURAL STUDS MAY BE PUNCHED UNLESS NOTED OTHERWISE. STRUCTURAL TRACK SHALL BE UNPUNCHED UNLESS NOTED OTHERWISE.

**REVIEWED IN ACCORDANCE WITH THE REQUIREMENTS OF T2A, CCR**

**APPROVED**

Office of Statewide Health Planning & Development
FACILITIES DEVELOPMENT DIVISION

**AGENCY STAMP**

**CODE:**
2010 CBC

**SECTION TITLE:**
STANDARD PARTITION WALL DETAILS

**SHEET TITLE:**
METAL STUD PROFILES

**ISSUE DATE:** 01/06/12

**OPD NO.:** ST1.00
POWER ACTUATED FASTENER (PAF) GENERAL NOTES (INSTALLED IN CONCRETE FILLED METAL DECK OR CONC SLAB)

1. POWER ACTUATED FASTENER (PAF), POWDER DRIVEN FASTENERS (PDF), POWER DRIVEN PINS (PDP), SHOT PINS ALL REPRESENT THE SAME FASTENER AND WILL HEREAFTER BE REFERRED TO AS POWER ACTUATED FASTENERS (PAF).
2. ALLOWABLE STRENGTHS SHALL BE COMPARED TO ALLOWABLE STRESS DESIGN (ASD) LEVEL DEMAND IN ACCORDANCE WITH THE 2010 CBC SECTION 1605A.3.1.
3. ALLOWABLE STRENGTHS ARE FOR A SINGLE FASTENER WHICH MEET REQUIREMENTS PER SECTION BELOW AND TABLES ON ST1.02. THE ALLOWABLE STRENGTHS ARE BASED UPON 75% OF THE LEAST OF THE ALLOWABLE STRENGTHS LISTED IN THE ICC ESRS 2299 & 1799.
4. MINIMUM CONCRETE STRENGTH f'c=2000 PSI FOR NORMAL WEIGHT CONCRETE AND f'c=3000 PSI FOR ALL LIGHT WEIGHT CONCRETE UNLESS NOTED OTHERWISE.
5. POWER ACTUATED FASTENER INSTALLED THROUGH LOW FLUTES OF THE METAL DECK SHALL MEET THE REQUIREMENTS OF THE INSTALLATION CRITERIA AND SECTION BELOW.
6. MINIMUM EDGE DISTANCE OF 1 1/8" FROM THE EDGE OF METAL DECK WEB AND 4" FROM THE EDGE OF THE DECK.
7. STEEL DECK TO BE A MINIMUM OF 20GA.
8. CONCRETE FILL DEPTH ABOVE THE TOP OF METAL DECK MUST BE A MINIMUM OF 3 1/4" AT LIGHT WEIGHT CONCRETE COMPOSITE METAL DECK.
9. PAF SHALL NOT BE USED TO RESIST SEISMIC SHEAR FORCES EXCEPT AT INTERIOR NON-LOAD BEARING, NON-SHEAR WALL PARTITION WALLS (AS PERMITTED BY 2010 CBC SECTION 1911A.1.1) AND COMPONENTS EXEMPT FROM CONSTRUCTION DOCUMENT REVIEW BY 2010 CBC SECTION 1615A.1.12 (NOT PERMITTED TO TAKE SEISMIC SHEAR BY ICC-ES AG70 FOR ANY OTHER CONDITIONS). PAF SHALL NOT BE USED TO CARRY SEISMIC TENSION LOADS (EXCEPT FOR VERTICAL SEISMIC LOAD PRODUCED BY SELF WEIGHT OF THE COMPONENTS) OR IN CRACKED CONCRETE UNLESS APPROVED FOR SUCH LOADING BY OSHPD.
10. PAF SHALL NOT BE USED IN PRE-STRESSED CONCRETE UNLESS NON-DESTRUCTIVE TESTING METHODS ARE USED TO LOCATE STRAND AND REINFORCEMENT PRIOR TO FASTENER INSTALLATION.
11. PAF INSTALLATION SHALL NOT NICK OR DAMAGE EXISTING CONCRETE REINFORCEMENT. SHOULD THIS OCCUR THE RDP IN RESPONSIBLE CHARGE SHALL BE NOTIFIED IMMEDIATELY. PAF SHALL BE INSTALLED 1" CLEAR OF EXISTING REINFORCEMENT. THIS MAY REQUIRE NON-DESTRUCTIVE TESTING.
12. PAF SHALL BE INSTALLED PER CURRENT ICC-ES EVALUATION REPORTS (OR REPORTS FROM OTHER TESTING AGENCIES ACCEPTABLE TO OSHPD).
13. TESTING OF PAF SHALL BE PER 2010 CBC SECTION 1916A.7. MINIMUM CONCRETE SUBSTRATE THICKNESS IS THREE TIMES THE PAF PENETRATION INTO THE CONCRETE SUBSTRATE.
14. TESTING IS NOT REQUIRED OF PAF USED TO ATTACHED TRACKS OF INTERIOR NON-SHEAR WALL PARTITIONS FOR SHEAR ONLY WHERE THERE ARE AT LEAST THREE FASTENERS.
15. TOTAL ALLOWABLE LOADS IN TENSION, SHEAR OR TENSION SHEAR COMBINATIONS SHALL NOT EXCEED 90 LB AS PERMITTED BY EXCEPTION TO THE 2010 CBC SECTION 1615A.1.15.
16. REFER TO NOTE 6D ON ST1.01 FOR ADDITIONAL PAF REQUIREMENTS.
<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>POWER ACTUATED FASTENER INSTALLED IN SAND–LIGHTWEIGHT CONCRETE THROUGH METAL DECK (f’c MIN=3000 PSI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOMINAL SHANK DIAMETER (IN)</td>
<td>MIN. EMBED (IN)</td>
</tr>
<tr>
<td>0.145 MIN</td>
<td>1 1/4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TABLE 2</th>
<th>POWER ACTUATED FASTENER INSTALLED INTO STRUCTURAL SAND–LIGHTWEIGHT CONCRETE (f’c MIN=3000 PSI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOMINAL SHANK DIAMETER (IN)</td>
<td>MIN. EMBED (IN)</td>
</tr>
<tr>
<td>0.145 MIN</td>
<td>1 1/4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TABLE 3</th>
<th>POWER ACTUATED FASTENER INSTALLED INTO NORMAL–WEIGHT CONCRETE (f’c MIN=2000 PSI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOMINAL SHANK DIAMETER (IN)</td>
<td>MIN. EMBED (IN)</td>
</tr>
<tr>
<td>0.145 MIN</td>
<td>1 1/4</td>
</tr>
</tbody>
</table>
EXPANSION ANCHOR GENERAL NOTES

1. ALLOWABLE STRENGTHS SHALL BE COMPARED TO ALLOWABLE STRESS DESIGN (ASD) LEVEL DEMAND IN ACCORDANCE WITH THE 2010 CBC SECTION 1805A.3.1.
2. ALLOWABLE STRENGTHS ARE FOR SINGLE ANCHORS WHICH MEET MIN. REQUIREMENTS PER TABLE & SECTION BELOW.
3. MINIMUM CONCRETE STRENGTH $f_{c'}=3000$ PSI.
4. EXPANSION ANCHORS INSTALLED THROUGH UPPER OR LOWER FLUTES OF METAL DECK SHALL MEET THE REQUIREMENTS OF THE INSTALLATION CRITERIA AND SECTION BELOW.
5. STEEL DECK TO BE MIN. 20 GA. W-DECK.
6. MINIMUM CONCRETE FILL DEPTH ABOVE THE TOP OF METAL DECK PER SECTION AND INSTALLATION CRITERIA BELOW.
7. EXPANSION ANCHORS SHALL NOT BE USED IN PRE-STRESSED CONCRETE UNLESS NON-DESTRUCTIVE TESTING METHODS ARE USED TO LOCATE STRAND & REINFORCING PRIOR TO ANCHOR INSTALLATION.
8. EXPANSION ANCHOR INSTALLATION SHALL NOT NICK OR DAMAGE EXISTING REINFORCEMENT. SHOULD THIS OCCUR THE RDP IN RESPONSIBLE CHARGE SHALL BE NOTIFIED IMMEDIATELY. EXPANSION ANCHORS SHALL BE INSTALLED 1" CLEAR OF EXISTING REINFORCEMENT.
9. EXPANSION ANCHORS SHALL BE INSTALLED PER CURRENT ICC-ES EVALUATION REPORT OR REPORT FROM OTHER TESTING AGENCY ACCEPTABLE TO OSHPD.
11. EXPANSION ANCHORS SHALL BE INSTALLED TO COMPLY W/ THE MINIMUM SLAB THICKNESS REQUIREMENTS ESTABLISHED BY THE ICC-ESR FOR THE SPECIFIED ANCHOR.
12. REFER TO NOTE 9C ON STO.01 FOR ADDITIONAL EXPANSION ANCHOR REQUIREMENTS.
13. ALL VALUES IN TABLES ARE FOR CRACKED CONCRETE & INCLUDE 0.75 REDUCTION BASED ON ACI 318-08 D3.3.3 REQUIREMENTS. THE ALLOWABLE STRENGTHS ARE BASED UPON THE LEAST OF THE ALLOWABLE STRENGTHS CALCULATED USING THE ICC ESRS 1917, 2427 & 3037 AND USING AN $\alpha$ FACTOR OF 1.4.

<table>
<thead>
<tr>
<th>EXPANSION ANCHORS INSTALLATION CRITERIA</th>
<th>NOMINAL ANCHOR DIAMETER (IN)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3/8</td>
</tr>
<tr>
<td>EFFECTIVE MIN. EMBEDMENT (IN)</td>
<td>2</td>
</tr>
<tr>
<td>MIN. MEMBER THICKNESS NWC SLAB OR BEAM</td>
<td>4.5</td>
</tr>
<tr>
<td>(ONLY (IN))</td>
<td></td>
</tr>
<tr>
<td>MIN. ANCHOR SPACING (3 x EMBED) (IN)</td>
<td>6 3/4</td>
</tr>
<tr>
<td>MIN. EDGE DISTANCE (IN)</td>
<td>6</td>
</tr>
</tbody>
</table>
### Table 1
**Expansion Anchors Installed In To The Underside Of Structural Sand-Lightweight Concrete (f’c MIN=3000 PSI) Over Metal Deck**

<table>
<thead>
<tr>
<th>ANCHOR DIA. (IN)</th>
<th>EMBED (IN)</th>
<th>SHEAR (LB)</th>
<th>TENSION (LB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8</td>
<td>2</td>
<td>467</td>
<td>508</td>
</tr>
<tr>
<td>1/2</td>
<td>2 1/4</td>
<td>643</td>
<td>508</td>
</tr>
<tr>
<td>1/2</td>
<td>3 1/4</td>
<td>1108</td>
<td>912</td>
</tr>
<tr>
<td>5/8</td>
<td>3 1/8</td>
<td>845</td>
<td>696</td>
</tr>
<tr>
<td>5/8</td>
<td>4</td>
<td>1919</td>
<td>1617</td>
</tr>
</tbody>
</table>

### Table 2
**Expansion Anchors Installed In To The Top Of Structural Sand-Lightweight Concrete (f’c MIN=3000 PSI) Over Metal Deck**

<table>
<thead>
<tr>
<th>ANCHOR DIA. (IN)</th>
<th>EMBED (IN)</th>
<th>SHEAR (LB)</th>
<th>TENSION (LB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8</td>
<td>2</td>
<td>593</td>
<td>520</td>
</tr>
<tr>
<td>1/2</td>
<td>2 1/4</td>
<td>593</td>
<td>550</td>
</tr>
</tbody>
</table>

### Table 3
**Expansion Anchors Installed In Normal Weight Concrete (f’c MIN=3000 PSI)**

<table>
<thead>
<tr>
<th>ANCHOR DIA. (IN)</th>
<th>EMBED (IN)</th>
<th>SHEAR (LB)</th>
<th>TENSION (LB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8</td>
<td>2</td>
<td>638</td>
<td>866</td>
</tr>
<tr>
<td>1/2</td>
<td>2 1/4</td>
<td>987</td>
<td>917</td>
</tr>
<tr>
<td>1/2</td>
<td>3 1/4</td>
<td>2046</td>
<td>1875</td>
</tr>
<tr>
<td>5/8</td>
<td>3 1/8</td>
<td>1887</td>
<td>1719</td>
</tr>
<tr>
<td>5/8</td>
<td>4</td>
<td>2793</td>
<td>2581</td>
</tr>
</tbody>
</table>
POWER ACTUATED FASTENER (PAF) GENERAL NOTES (INSTALLED IN STEEL)

1. MINIMUM STEEL TENSILE STRENGTH $F_u = 58$ KSI.
2. MINIMUM SPACING 1 INCH.
3. MINIMUM EDGE DISTANCE 1/2 INCH.
4. USE KNURED SHANK.
5. POWER ACTUATED FASTENERS (PAF) SHALL BE INSTALLED PER CURRENT ICC-ES EVALUATION REPORTS OR REPORTS FROM OTHER TESTING AGENCIES ACCEPTABLE TO OSHPD.
6. SEE GENERAL NOTE 6D & E ON ST0.01 FOR PAF REQUIREMENTS & ATTACHMENT TO STEEL.
7. POWER POWER ACTUATED FASTENER (PAF), POWDER DRIVEN FASTENERS (PDF), POWER DRIVEN PINS (PDP), SHOT PINS, ARE COMMON NOMINCLATURES THAT ALL REPRESENT THE SAME FASTENER.
8. ALLOWABLE STRENGTHS SHALL BE COMPARED TO ALLOWABLE STRESS DESIGN (ASD) LEVEL DEMAND IN ACCORDANCE WITH THE 2010 CBC SECTION 1605A.3.1.
10. TOTAL ALLOWABLE TENSION, SHEAR OR TENSION SHEAR COMBINATION SHALL NOT EXCEED 250 LB AS REQUIRED BY THE 2010 CBC.
11. LIMIT USE TO INTERIOR NON-BEARING, NON-SHEAR WALL PARTITIONS AND COMPONENTS EXEMPT FROM CONSTRUCTION DOCUMENTS REVIEW BY THE 2010 CBC SECTION 1815A.1.12 (NOT PERMITTED TO TAKE SEISMIC SHEAR BY ICC-ES AC 70 FOR ANY OTHER CONDITIONS.)

POWER ACTUATED FASTENER (PAF) ALLOWABLE STRENGTHS (INSTALLED IN STEEL)

<table>
<thead>
<tr>
<th>NOMINAL SHANK DIAMETER (IN)</th>
<th>STEEL THICKNESS (IN)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3/16</td>
</tr>
<tr>
<td></td>
<td>TENSION (LB)</td>
</tr>
<tr>
<td>0.145 MIN</td>
<td>218</td>
</tr>
</tbody>
</table>
1. The allowable strengths are based upon the AISI S100-07/S2-10 and are limited by actual tested strength of the screws in tension and shear.

2. The allowable strengths are based upon the least of the average tested tensile and shear strengths tabulated from ICC ESRS’ 1976, 2196, 1730, 140B, and the steel stud manufacturer’s association (SSMA). Fastener types and sizes apply to non-proprietary fastener types and sizes, and do not endorse a specific manufacturer. Where proprietary fasteners are specified, no exceptions are taken to the use of manufacturer specific values that are based upon the AISI S100-07/S2-10, Section E4. All screw fasteners shall satisfy ICC-ES AC18—acceptance criteria for self-tapping screw fasteners.

3. Table 1 represents allowable tension and shear strengths for non-proprietary sheet metal screws for steel to steel connections.

4. Table 2 and 3 represent allowable tension and shear strengths that incorporate the effects of either one or two layers of 5/8” gypsum board between fastener head and connecting steel material.

5. In order to use the values in Tables 1, 2, and 3, the attachments shall be detailed in such a way as to avoid prying and the studs must be stabilized with full-depth blocking with continuous straps along the flanges or with backing bars.

6. Penetration of screws through joined material should not be less than 3 exposed threads.

7. Steel thicknesses joined are assumed to be the same. If dissimilar thicknesses are being connected, the value for the thinner part joined shall be used.

8. The minimum spacing between centers of fasteners shall not be less than 3 x fastener diameter. The minimum edge distance from the center of a fastener to the edge of any part shall not be less than 1.5 x fastener diameter. Where the end distance is parallel to the force on the fastener, the nominal shear strength shall be limited by section E4.3.2 of the AISI S100-07/S2-10.

9. Galvanized metal studs, track and sheet steel shall conform to ASTM A653 material (or other equivalent ASTM listed materials in the AISI S100-07/S2-10, section A2.1) with a minimum yield strength of 33 ksi for 43 mil (18 GA) and lighter, and minimum yield strength of 50 ksi for 54 mil (16 GA) & heavier.

10. Where values are not given, such combinations of screw sizes & material thickness are not recommended.

11. If the attachment details result in prying with a moment arm not to exceed 1 5/8", the values in Table 4 may be used. If the attachment details result in prying with a moment arm that exceeds 1 5/8", the reregistered design professional in responsible charge of the project shall determine the allowable values and submit substantiation for them to OSHPD for review.

12. Interaction of shear and tension shall be based on T/Tall + V/Vall ≤ 1.0.

13. Refer to note 6A on ST0.00 for additional sheet metal screw requirements.
### SHEET METAL SCREW (SMS) ALLOWABLE STRENGTHS

#### TABLE 1

**Sheet Metal Screw Allowable Stresses for Steel to Steel Connections.**

<table>
<thead>
<tr>
<th>$F_y$ (KSI)</th>
<th>MIL (Steel Ga)</th>
<th>NO. 14</th>
<th>NO. 12</th>
<th>NO. 10</th>
<th>NO. 8</th>
<th>NO. 6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0.250 IN</td>
<td>0.216 IN</td>
<td>0.190 IN</td>
<td>0.164 IN</td>
<td>0.138 IN</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SHEAR (LB)</td>
<td>TENSION (LB)</td>
<td>SHEAR (LB)</td>
<td>TENSION (LB)</td>
<td>SHEAR (LB)</td>
</tr>
<tr>
<td>50</td>
<td>97 (12)</td>
<td>704</td>
<td>275</td>
<td>525</td>
<td>205</td>
<td></td>
</tr>
<tr>
<td>68</td>
<td>704 (14)</td>
<td>525</td>
<td>205</td>
<td>405</td>
<td>159</td>
<td></td>
</tr>
<tr>
<td>54</td>
<td>613 (16)</td>
<td>525</td>
<td>205</td>
<td>405</td>
<td>159</td>
<td>303</td>
</tr>
<tr>
<td>33</td>
<td>43 (18)</td>
<td>302</td>
<td>144</td>
<td>280</td>
<td>124</td>
<td>263</td>
</tr>
<tr>
<td></td>
<td>33 (20)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### NOTES:
1. SEE GENERAL NOTES ON ST1.06 FOR MORE INFORMATION.
2. WHERE ONE OR TWO LAYERS OF GYP BOARD OCCURS BETWEEN STEEL SURFACES, THE ALLOWABLE VALUES OF TABLE 2 & 3 SHALL BE USED.
3. ALLOWABLE STRENGTH VALUES DO NOT ACCOUNT FOR EFFECTS FROM PRYING. THE RDP IN RESPONSIBLE CHARGE OF THE PROJECT SHALL PROVIDE ADEQUATE BLOCKING/RESTRAINT TO PREVENT PRYING ACTION. WHERE PRYING OCCURS, THE VALUES AND CONSTRAINTS OF TABLE 4 SHALL BE USED.

#### TABLE 2 — NON-PRYING CONDITION

**Sheet Metal Screw Allowable Stresses for Steel to Steel Connections with One Layer of 5/8” GYP Board Between Steel Surfaces.**

<table>
<thead>
<tr>
<th>$F_y$ (KSI)</th>
<th>MIL (Steel Ga)</th>
<th>NO. 14</th>
<th>NO. 12</th>
<th>NO. 10</th>
<th>NO. 8</th>
<th>NO. 6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0.250 IN</td>
<td>0.216 IN</td>
<td>0.190 IN</td>
<td>0.164 IN</td>
<td>0.138 IN</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SHEAR (LB)</td>
<td>TENSION (LB)</td>
<td>SHEAR (LB)</td>
<td>TENSION (LB)</td>
<td>SHEAR (LB)</td>
</tr>
<tr>
<td>50</td>
<td>97 (12)</td>
<td>226</td>
<td>275</td>
<td>180</td>
<td>205</td>
<td></td>
</tr>
<tr>
<td>68</td>
<td>226 (14)</td>
<td>275</td>
<td>180</td>
<td>205</td>
<td>140</td>
<td>159</td>
</tr>
<tr>
<td>54</td>
<td>226 (16)</td>
<td>261</td>
<td>180</td>
<td>205</td>
<td>140</td>
<td>159</td>
</tr>
<tr>
<td>33</td>
<td>43 (18)</td>
<td>226</td>
<td>144</td>
<td>180</td>
<td>124</td>
<td>140</td>
</tr>
<tr>
<td></td>
<td>33 (20)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### NOTES:
1. SEE GENERAL NOTES ON ST1.06 FOR MORE INFORMATION.
2. ALLOWABLE STRENGTH VALUES DO NOT ACCOUNT FOR EFFECTS FROM PRYING. THE RDP IN RESPONSIBLE CHARGE TO PROVIDE ADEQUATE BLOCKING/RESTRAINT TO PREVENT PRYING ACTION. WHERE PRYING OCCURS, THE VALUES AND CONSTRAINTS OF TABLE 4 SHALL BE USED.

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**REVIEWED IN ACCORDANCE WITH THE REQUIREMENTS OF T24. CCR APPROVED**

[Signature]

Office of Statewide Health Planning & Development
FACILITIES DEVELOPMENT DIVISION

**AGENCY STAMP**

**CODE**

2010 CBC

**SECTION TITLE:**

STANDARD PARTITION WALL DETAILS

**Sheet Title:**

SHEET METAL SCREW ALLOWABLE STRENGTHS
### Table 3 - Non-Prying Condition
Sheet Metal Screw Allowable Strengths for Steel to Steel Connections with Two Layers of 5/8" Gyp Board Between Steel Surfaces.

<table>
<thead>
<tr>
<th>$F_v$ (ksi)</th>
<th>Mil (Steel GA)</th>
<th>Fastener Size</th>
<th>NO. 14</th>
<th>NO. 12</th>
<th>NO. 10</th>
<th>NO. 8</th>
<th>NO. 6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0.250 in</td>
<td>0.216 in</td>
<td>0.190 in</td>
<td>0.164 in</td>
<td>0.138 in</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>97 (12)</td>
<td>166</td>
<td>275</td>
<td>130</td>
<td>205</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>68 (14)</td>
<td>166</td>
<td>275</td>
<td>130</td>
<td>205</td>
<td>100</td>
<td>159</td>
</tr>
<tr>
<td></td>
<td>54 (16)</td>
<td>166</td>
<td>261</td>
<td>130</td>
<td>205</td>
<td>100</td>
<td>159</td>
</tr>
<tr>
<td>33</td>
<td>43 (18)</td>
<td>166</td>
<td>144</td>
<td>130</td>
<td>124</td>
<td>100</td>
<td>109</td>
</tr>
<tr>
<td></td>
<td>33 (20)</td>
<td>166</td>
<td>144</td>
<td>130</td>
<td>124</td>
<td>100</td>
<td>109</td>
</tr>
</tbody>
</table>

**Notes:**
1. See General Notes on ST1.06 for more information.
2. Allowable strength values do not account for effects from prying. RDP in responsible charge to provide adequate blocking/restraint to prevent prying action. Where prying occurs, the values and constraints of Table 4 shall be used.

### Table 4 - Prying Condition
Sheet Metal Screw Allowable Strengths for Steel to Steel Connections with One or Two Layers of 5/8" Gyp Board Between Steel Surfaces and Maximum Prying Moment Arm of 1 5/8".

<table>
<thead>
<tr>
<th>$F_v$ (ksi)</th>
<th>Mil (Steel GA)</th>
<th>Fastener Size</th>
<th>NO. 14</th>
<th>NO. 12</th>
<th>NO. 10</th>
<th>NO. 8</th>
<th>NO. 6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0.250 in</td>
<td>0.216 in</td>
<td>0.190 in</td>
<td>0.164 in</td>
<td>0.138 in</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>97 (12)</td>
<td>40</td>
<td>275</td>
<td>30</td>
<td>205</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>68 (14)</td>
<td>40</td>
<td>275</td>
<td>30</td>
<td>205</td>
<td>25</td>
<td>159</td>
</tr>
<tr>
<td></td>
<td>54 (16)</td>
<td>40</td>
<td>261</td>
<td>30</td>
<td>205</td>
<td>25</td>
<td>159</td>
</tr>
<tr>
<td>33</td>
<td>43 (18)</td>
<td>40</td>
<td>144</td>
<td>30</td>
<td>124</td>
<td>25</td>
<td>109</td>
</tr>
<tr>
<td></td>
<td>33 (20)</td>
<td>40</td>
<td>144</td>
<td>30</td>
<td>124</td>
<td>25</td>
<td>109</td>
</tr>
</tbody>
</table>

**Notes:**
1. See General Notes on ST1.06 for more information.
2. The allowable strength values listed in Table 4 are based upon a limited test assembly where the origin and direction of the load results in prying upon the fastener. The magnitude of this prying effect shall be limited to a moment arm of 1 5/8" from the fastener.
SCREW ANCHOR GENERAL NOTES

1. ALLOWABLE STRENGTHS SHALL BE COMPARED TO ALLOWABLE STRESS DESIGN (ASD) LEVEL DEMAND IN ACCORDANCE WITH THE 2010 CBC SECTION 1605A.3.1.
2. ALLOWABLE STRENGTHS ARE FOR SINGLE ANCHORS WHICH MEET MIN. REQUIREMENTS PER TABLE & SECTION BELOW.
3. MINIMUM CONCRETE STRENGTH f'c=3000 PSI.
4. STEEL DECK TO BE MIN. 20 GA. W-DECK.
5. MINIMUM CONCRETE FILL DEPTH ABOVE THE TOP OF METAL DECK PER SECTION AND INSTALLATION CRITERIA BELOW.
6. SCREW ANCHORS SHALL NOT BE USED IN PRE-STRESSED CONCRETE UNLESS NON-DESTRUCTIVE TESTING METHODS ARE USED TO LOCATE STRAND & REINFORCING PRIOR TO ANCHOR INSTALLATION.
7. SCREW ANCHOR INSTALLATION SHALL NOT NICK OR DAMAGE EXISTING REINFORCEMENT. SHOULD THIS OCCUR THE RDP IN RESPONSIBLE CHARGE SHALL BE NOTIFIED IMMEDIATELY. SCREW ANCHORS SHALL BE INSTALLED 1" CLEAR OF EXISTING REINFORCEMENT.
8. SCREW ANCHORS SHALL BE INSTALLED PER CURRENT ICC-ES EVALUATION REPORT OR REPORT FROM OTHER TESTING AGENCIES ACCEPTABLE TO OSHPD.
10. SCREW ANCHORS SHALL BE INSTALLED TO COMPLY W/ THE MINIMUM SLAB THICKNESS REQUIREMENTS ESTABLISHED BY THE ICC-ESR FOR THE SPECIFIED ANCHOR.
11. REFER TO NOTE 6C ON ST0.00 FOR ADDITIONAL SCREW ANCHOR REQUIREMENTS.
12. ALL VALUES IN TABLES ARE FOR CRACKED CONCRETE & INCLUDE 0.75 REDUCTION BASED ON ACI 318-08 D3.3.3 REQUIREMENTS. THE ALLOWABLE STRENGTHS ARE BASED UPON THE LEAST OF THE ALLOWABLE STRENGTHS CALCULATED USING THE ICC ESRS 2526, 2713 & 3027 AND USING AN $\alpha$ FACTOR OF 1.4.
13. USE OF SCREW ANCHOR SHALL BE LIMITED TO DRY INTERIOR CONDITIONS. REUSE OF SCREW ANCHOR OR SCREW ANCHOR HOLE SHALL NOT BE PERMITTED.

**SCREW ANCHORS INSTALLATION CRITERIA**

<table>
<thead>
<tr>
<th>NOMINAL ANCHOR DIAMETER (IN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EFFECTIVE MIN. EMBEDMENT (IN)</th>
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</thead>
<tbody>
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</table>

<table>
<thead>
<tr>
<th>MIN. MEMBER THICKNESS</th>
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</thead>
<tbody>
<tr>
<td>MWC SLAB OR BEAM ONLY (IN)</td>
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<tr>
<td>4 1/4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MIN. ANCHOR SPACING (IN)</th>
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</thead>
<tbody>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MIN. EDGE DISTANCE (IN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 3/4</td>
</tr>
</tbody>
</table>
## Screw Anchor Allowable Strengths

### Table 1
**Screw Anchors Installed in to the Top of Structural Sand-Lightweight Concrete (f'c min=3000 PSI) Over Metal Deck**

<table>
<thead>
<tr>
<th>Anchor Dia. (in)</th>
<th>Embed (in)</th>
<th>Shear (lb)</th>
<th>Tension (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8</td>
<td>2 1/2</td>
<td>357</td>
<td>236</td>
</tr>
<tr>
<td>1/2</td>
<td>2 1/2</td>
<td>393</td>
<td>309</td>
</tr>
</tbody>
</table>

### Table 2
**Screw Anchors Installed in Normal Weight Concrete (f'c min=3000 PSI)**

<table>
<thead>
<tr>
<th>Anchor Dia. (in)</th>
<th>Embed (in)</th>
<th>Shear (lb)</th>
<th>Tension (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8</td>
<td>2 1/2</td>
<td>594</td>
<td>414</td>
</tr>
<tr>
<td>1/2</td>
<td>2 1/2</td>
<td>655</td>
<td>515</td>
</tr>
<tr>
<td>5/8</td>
<td>3 1/2</td>
<td>1174</td>
<td>961</td>
</tr>
<tr>
<td>5/8</td>
<td>3 1/4</td>
<td>1098</td>
<td>1177</td>
</tr>
<tr>
<td>5/8</td>
<td>5</td>
<td>2164</td>
<td>1364</td>
</tr>
</tbody>
</table>

---

**Revised in Accordance With the Requirements of T24, CCR**

**Approved**

Office of Statewide Health Planning & Development

**Facilities Development Division**

**Code:** 2010 CBC

**Section Title:** Standard Partition Wall Details

**Sheet Title:** Screw Anchor Design Allowable Strengths

**Issue Date:** 01/06/12

**OPD No.:** ST1.10
TYPICAL PARTITION WALL CONDITIONS

CONDITION 'A' – PARTITION WALL WITHOUT ATTACHMENTS. SEE DETAIL ST2.02

CONDITION 'B' – PARTITION WALL SUPPORTING CABINETS OR EQUIPMENT ON ONE SIDE OR BOTH SIDES OF THE WALL DISTRIBUTING UP TO 50 LB TOTAL VERTICAL LOAD PER STUD (37 PLF). REFER TO GENERAL NOTE 7C ON ST0.01. CENTER OF GRAVITY LESS THAN 6" FROM THE FACE OF THE STUD. SEE DETAIL ST2.03.

CONDITION 'C' – PARTITION WALL SUPPORTING OVERHEAD AND/OR BASE CABINETS OR EQUIPMENT ON ONE SIDE OR BOTH SIDES OF THE WALL, DISTRIBUTING UP TO 152 LB TOTAL VERTICAL LOAD PER STUD (114 PLF). REFER TO GENERAL NOTE 7C ON ST0.01. CENTER OF GRAVITY WITHIN 6" OF FACE OF THE STUD. SEE DETAIL ST2.04.

CONDITION 'D' – PARTITION WALL SUPPORTING FULL HEIGHT CABINETS OR EQUIPMENT ON ONE SIDE OR BOTH SIDES OF THE WALL, DISTRIBUTING UP TO 380 LB TOTAL VERTICAL LOAD PER STUD (285 PLF). REFER TO GENERAL NOTE 7C ON ST0.01. CENTER OF GRAVITY WITHIN 6" OF FACE OF THE STUD. SEE DETAIL ST2.04.
**PARTITION WALL SCHEDULES**

### SCHEDULE 1: MINIMUM PARTITION WALL STUD SIZE (PARTITION CONDITION 'A')

<table>
<thead>
<tr>
<th>Spc</th>
<th>9 FT</th>
<th>12 FT</th>
<th>16 FT</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-0.99</td>
<td>362S137-33</td>
<td>362S137-33</td>
<td>362S137-43</td>
</tr>
<tr>
<td>1.00-1.25</td>
<td>362S137-33</td>
<td>362S137-33</td>
<td>362S137-43</td>
</tr>
<tr>
<td>1.26-1.45</td>
<td>362S137-33</td>
<td>362S137-33</td>
<td>362S137-43</td>
</tr>
<tr>
<td>1.46-1.95</td>
<td>362S137-33</td>
<td>362S137-33</td>
<td>362S137-54</td>
</tr>
</tbody>
</table>

### SCHEDULE 2: MINIMUM PARTITION WALL STUD SIZE (PARTITION CONDITION 'B')

<table>
<thead>
<tr>
<th>Spc</th>
<th>9 FT</th>
<th>12 FT</th>
<th>16 FT</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-0.99</td>
<td>362S137-33</td>
<td>362S137-43</td>
<td>400S137-43</td>
</tr>
<tr>
<td>1.00-1.25</td>
<td>362S137-33</td>
<td>362S137-43</td>
<td>400S137-43</td>
</tr>
<tr>
<td>1.26-1.45</td>
<td>362S137-33</td>
<td>362S137-43</td>
<td>400S137-43</td>
</tr>
<tr>
<td>1.46-1.95</td>
<td>362S137-33</td>
<td>362S137-43</td>
<td>400S137-43</td>
</tr>
</tbody>
</table>

### SCHEDULE 3: MINIMUM PARTITION WALL STUD SIZE (PARTITION CONDITION 'C')

<table>
<thead>
<tr>
<th>Spc</th>
<th>9 FT</th>
<th>12 FT</th>
<th>16 FT</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-0.99</td>
<td>362S137-33</td>
<td>400S137-54</td>
<td>600S137-33</td>
</tr>
<tr>
<td>1.00-1.25</td>
<td>362S137-43</td>
<td>400S137-54</td>
<td>600S137-33</td>
</tr>
<tr>
<td>1.26-1.45</td>
<td>362S137-43</td>
<td>400S137-54</td>
<td>600S137-33</td>
</tr>
<tr>
<td>1.46-1.95</td>
<td>362S137-54</td>
<td>400S137-54</td>
<td>600S137-33</td>
</tr>
</tbody>
</table>

### SCHEDULE 4: MINIMUM PARTITION WALL STUD SIZE (PARTITION CONDITION 'D')

<table>
<thead>
<tr>
<th>Spc</th>
<th>9 FT</th>
<th>12 FT</th>
<th>16 FT</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-0.99</td>
<td>362S137-33</td>
<td>400S137-43</td>
<td>600S137-43</td>
</tr>
<tr>
<td>1.00-1.25</td>
<td>362S137-43</td>
<td>400S137-43</td>
<td>600S137-43</td>
</tr>
<tr>
<td>1.26-1.45</td>
<td>362S137-43</td>
<td>400S137-43</td>
<td>600S137-43</td>
</tr>
<tr>
<td>1.46-1.95</td>
<td>400S137-54</td>
<td>600S137-54</td>
<td>600S137-54</td>
</tr>
</tbody>
</table>

**NOTES:**

1. PARTITION WALL STUDS ARE SPACED @ 16” O.C. TYPICAL UNLESS NOTED OTHERWISE.
2. SEE ST2.06 FOR PARTITION WALL ELEVATION & ADDITIONAL INFORMATION.
3. SEE ST2.00 FOR DEFINITION OF PARTITION WALL CONDITIONS.
4. SEE ST1.00 FOR METAL STUD PROFILES.
5. 362S137-33 IS 3 5/8” WIDE SSMA STUD WITH 1 3/8” WIDE FLANGE THAT IS 33 MIL THICK.
6. STUDS SHOWN IN THE TABLES ABOVE CAN BE REPLACED BY EQUIVALENT STUDS WITH EQUAL OR HIGHER AREA (A), SECTION MODULUS (S_x, S_y) AND MOMENT OF INERTIA (I) PROVIDED MATERIALS CONFORM TO THE SAME ASTM STANDARD WITH EQUAL OR HIGHER YIELD STRENGTH (f_y) AND ULTIMATE STRENGTH (f_u) WHEN APPROVED.
7. PARTITION WALLS TO HAVE LATERAL BRACING @ 48” O.C. PER ST4.00 OR ST4.01, FOR FULL HT OF PARTITION WALL. LATERAL BRACING IS NOT REQUIRED WHERE GYP BOARD IS INSTALLED ON BOTH SIDES OF PARTITION WALL.

---

**REVIEWED IN ACCORDANCE WITH THE REQUIREMENTS OF T24, CCR APPROVED**

Office of Statewide Health Planning & Development
FACILITIES DEVELOPMENT DIVISION

**2010 CBC**

**STANDARD PARTITION WALL DETAILS**

**PARTITION WALL SCHEDULES**
LATERAL BRACING @ 48" O.C. PER ST4.00 OR ST4.01, TYP. FULL HT OF PARTITION WALL SEE NOTE 4 BELOW.

PARTITION WALL STUD @ 16" O.C. AS FOLLOWS:
- USE STUDS PER SCHEDULE 1 FOR CONDITION "A"
- USE STUDS PER SCHEDULE 2 FOR CONDITION "B"
- USE STUDS PER SCHEDULE 3 FOR CONDITION "C"
- USE STUDS PER SCHEDULE 4 FOR CONDITION "D".

BOTTOM ANCHORAGE PER ST8.00

SEE NOTE 3 BELOW

STRUCTURE ABOVE

CEILING LINE

FULL HEIGHT PARTITION WALL

PARTITION WALL STUD (SEE FULL HEIGHT PARTITION WALL SECTION FOR MORE INFORMATION)

LATERAL BRACING @ 48" O.C. PER ST4.00 OR ST4.01, TYP. FULL HT OF PARTITION WALL SEE NOTE 4 BELOW.

BOTTOM ANCHORAGE PER ST8.00

SEE NOTE 3 BELOW

PARTIAL HEIGHT PARTITION WALL

NOTES:
1. PARTITION WALL SCHEDULES PER ST2.01.
2. SEE ST2.00 FOR DEFINITION OF PARTITION WALL CONDITIONS.
3. SEE ST6.11 FOR TOP & BOTTOM CONNECTION DEMANDS.
4. LATERAL BRACING IS NOT REQUIRED WHERE GYP BOARD IS INSTALLED ON BOTH SIDES OF PARTITION WALL.
PARTITION WALL CONDITION 'B'

**NOTES:**

1. This detail applies to partition walls supporting cabinets or equipment that conform to the requirements of condition 'B' per ST2.00.
2. Where cabinets or equipment occur on both sides of the partition wall, either of the following options may be used:
   A. Decrease spacing of wall studs, bottom track anchorage and top track anchorage by 50% from that shown on ST2.02, ST6.00, ST7.00 & ST8.00 (i.e. provide twice the quantity of wall studs and top and bottom track anchorage).
   B. Limit the combined weight of cabinets or equipment on opposite sides of wall as shown in option 2.
      For example:
      \[ W1 = 50 \text{ LB/STUD MAX} \]
      \[ W2 + W3 = 50 \text{ LB/STUD MAX} \]
3. See ST2.01 for minimum partition wall stud size.
4. For typical partition wall sections see ST2.02.

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**AGENCY STAMP**

**CODE:**
2010 CBC

**SECTION TITLE:**
STANDARD PARTITION WALL DETAILS

**SHEET TITLE:**
CABINET OR EQUIPMENT ANCHORAGE TO PARTITION WALL, CONDITION 'B'

**ISSUE DATE:** 01/06/12

**OPD NO.:** ST2.03
B) CONDITION 'C' OVERHEAD AND / OR BASE CABINETS OR EQUIPMENT

C) CONDITION 'D' FULL HEIGHT CABINETS OR EQUIPMENT

NOTES:
1. THIS DETAIL APPLIES TO PARTITION WALLS SUPPORTING CABINETS OR EQUIPMENT THAT CONFORM TO THE REQUIREMENTS OF CONDITION 'C' OR 'D' PER ST2.02.
2. THIS DETAIL APPLIES TO PARTITION WALLS SUPPORTING OVERHEAD AND/OR BASE CABINET OR EQUIPMENT ON ONE SIDE OF THE WALL. WHERE CABINETS OR EQUIPMENT OCCUR ON BOTH SIDES OF THE WALL, THE FOLLOWING OPTION MAY BE USED:
   A. DECREASE SPACING OF WALL STUDS, BOTTOM TRACK ANCHORAGE AND TOP TRACK ANCHORAGE BY 50% FROM THAT SHOWN ON ST2.02, ST6.00, ST7.00 & ST8.00. (I.E. PROVIDE TWICE THE QUANTITY OF WALL STUDS AND TOP AND BOTTOM TRACK ANCHORAGE).
3. SEE ST2.01 FOR MINIMUM WALL STUD SIZE.
4. FOR TYPICAL PARTITION SECTIONS SEE ST2.02.

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CODE: 2010 CBC
SECTION TITLE: STANDARD PARTITION WALL DETAILS
ST2.04
CONC. OR CONC. BLOCK WALL

2 3/4"x2 3/4"x0"-2 1/2"x54 MIL CLIP ANGLE @ 32" O.C. W/ (2)
#8 S.M.S. TO TOP TRACK & (2) PAF TO CONC. WALL
SHORTEN HORIZONTAL LEG OF CLIP ANGLE AS REQ'D TO
COORDINATE WITH GAP, TYP.

CEILING LINE

1 5/8" MINX54 MIL METAL FURRING STUD @ 16" O.C. MAX
W/ 2 3/4"x2 3/4"x0"-2 1/2"x54 MIL CLIP ANGLE @ EA.
STUD @ 4'-0" O.C. VERTICALLY W/ (1) #8 S.M.S. TO
FURRING STUD & (1) PAF TO CONC. WALL.
ALTERNATIVELY, USE STUD SIZES PER ST2.01 WITH
LATERAL BRACING PER ST4.00 & ST4.01.

1 5/8" MINX54 MIL METAL FURRING STUD @ 16" O.C. MAX
ALTERNATIVELY, USE STUD SIZES PER ST2.01 WITH LATERAL
BRACING PER ST4.00 & ST4.01

1 1/4"
MAX GAP

WALL FINISH

NO CABINET OR EQUIPMENT SHALL
BE ANCHORED TO THIS FURRING

BOTTOM ANCHORAGE PER ST8.00

SCREW MAY BE INSTALLED
FROM THE INSIDE OR
OUTSIDE FACE OF TRACK

STUD FURRING ATTACHMENT TO CONCRETE
OR CONCRETE BLOCK WALL

NOTES:

1. SEE TOP CONNECTION DEMAND SCHEDULE ON ST6.11.
2. SEE ST1.01 & ST1.02 FOR PAF REQUIREMENTS AND ST1.03 & ST1.04 FOR EXPANSION ANCHOR REQUIREMENTS OR
ST1.09 & ST1.10 FOR SCREW ANCHOR REQUIREMENTS.
3. DETAIL IS LIMITED TO PARTITION WALL CONDITION 'A' PER ST2.00.

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2010 CBC

SECTION TITLE: STANDARD PARTITION WALL DETAILS

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Planning & Development
FACILITIES DEVELOPMENT DIVISION

CODE

ISSUE DATE: 01/06/12

OPD NO.: ST2.05
PARTITION WALL ELEVATION

NOTES:
1. The attachment of ceiling, equipment, etc. to the jamb, header or stud above the header is not permitted without the approval of the ROP in responsible charge & OSHPD.
2. Lateral bracing per ST4.00 & ST4.01 @ 4'-0" O.C. max. Lateral bracing not required where gyp. board occurs on both sides of partition wall.
3. See ST2.07 for condition at overlapping openings.

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Office of Statewide Health Planning & Development
FACILITIES DEVELOPMENT DIVISION

2010 CBC
STANDARD PARTITION WALL DETAILS
PARTITION WALL ELEVATION – FULL HEIGHT AND PARTIAL HEIGHT PARTITION WALLS
DUCT OPENING/WALL PENETRATION WHERE OCCURS

EXTEND HEADER FRAMING FROM JAMB OF DOOR/WINDOW TO END OF DUCT OPENING/WALL OPENING

WINDOW SILL WHERE OCCURS

FLOOR

ST3.02

DOOR OR WINDOW

OPENING WIDTH

FRAMED OPENING

WIDTH

JAMBS PER ST3.04

FRAMING AT OVERLAPPING OPENINGS

NOTES:
1. SEE ST2.06 FOR ADDITIONAL INFORMATION.
2. ATTACHMENT OF CEILING EQUIPMENT, ETC. TO THE JAMB, HEADER OR STUD ABOVE THE HEADER IS NOT PERMITTED WITHOUT THE APPROVAL OF THE RDP IN RESPONSIBLE CHARGE & OSHPD.

REVIEWED IN ACCORDANCE WITH THE REQUIREMENTS OF T2A, COR
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FACILITIES DEVELOPMENT DIVISION

ST2.07

2010 CBC

SECTION TITLE:
STANDARD PARTITION WALL DETAILS

SHEET TITLE:
PARTITION WALL ELEVATION - FRAMING AT OVERLAPPING OPENINGS

CODE:

ISSUE DATE: 01/06/12

REVISION: DATE:

OPD NO.:
### Partition Wall Opening Framing Schedule

<table>
<thead>
<tr>
<th>Opening Width</th>
<th>s/8</th>
<th>Partition Wall HT Up To</th>
<th>Conn. Detail</th>
<th>Jambs (# of Stud) - Mil</th>
<th>Header Framing</th>
<th>Sill (See Note 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>3 5/8&quot; Wall</td>
<td>4&quot; Wall</td>
<td>6&quot; Wall</td>
<td>Framing</td>
<td>Figure</td>
</tr>
<tr>
<td>0.25 - 0.99</td>
<td>9'-0&quot;</td>
<td>ST3.05-B</td>
<td>(1)-33</td>
<td>(1)-33</td>
<td>(1)-33</td>
<td>(1) Track &amp; 1 Stud</td>
</tr>
<tr>
<td>1.00 - 1.25</td>
<td>12'-0&quot;</td>
<td>ST3.05-A</td>
<td>(1)-33</td>
<td>(1)-33</td>
<td>(1)-33</td>
<td>(1) Track &amp; 1 Stud</td>
</tr>
<tr>
<td>1.26 - 1.45</td>
<td>9'-0&quot;</td>
<td>ST3.05-B</td>
<td>(1)-33</td>
<td>(1)-33</td>
<td>(1)-33</td>
<td>(1) Track &amp; 1 Stud</td>
</tr>
<tr>
<td>1.45 - 1.95</td>
<td>12'-0&quot;</td>
<td>ST3.05-A</td>
<td>(1)-33</td>
<td>(1)-33</td>
<td>(1)-33</td>
<td>(1) Track &amp; 1 Stud</td>
</tr>
<tr>
<td></td>
<td>16'-0&quot;</td>
<td>ST3.05-B</td>
<td>(1)-33</td>
<td>(1)-33</td>
<td>(1)-33</td>
<td>(1) Track &amp; 1 Stud</td>
</tr>
</tbody>
</table>

**Notes:**
1. See general notes on ST0.00, ST0.01, & ST0.02 for light gauge steel requirements and detail ST1.01 for section profiles.
2. Studs shall match wall sizes, i.e. 3625 for 3 5/8" wall, 4005 for 4" wall & 6005 for 6" wall.
3. Schedule for sill based on 4'-0" max ht. For sills taller than 4'-0" use header framing.
4. Jamb, header & sill design based on partition wall condition 'A' on ST2.00 & the following design assumptions:

**Diagram:**

- Partition Wall HT
- 4'-0" Opening Wall HT
- 7'-0" Opening Wall HT
- 8'-0" Top Window
- 9'-0" Taller Sill Opening
- Finish Floor

---

**2010 CBC**

**Standard Partition Wall Details**

**Partition Wall Opening Framing Schedule (4'-0" Max Opening Width)**
# Partition Wall Opening Framing Schedule

<table>
<thead>
<tr>
<th>Opening Width</th>
<th>Sill</th>
<th>Partition Wall Ht Up To:</th>
<th>Conn. Detail</th>
<th>Jamb (# of Stud) - Mil</th>
<th>Header</th>
<th>Sill (See Note 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3 5/8&quot; Wall</td>
<td>4&quot; Wall</td>
<td>6&quot; Wall</td>
</tr>
<tr>
<td>0.25 - 0.99</td>
<td>9' - 0&quot;</td>
<td>ST3.05 - C</td>
<td>ST3.05 - D OR ST3.05 - E</td>
<td>(1) - 54 OR (2) - 33</td>
<td>(1) - 54 OR (2) - 33</td>
<td>(1) - 43 OR (2) - 33</td>
</tr>
<tr>
<td></td>
<td>12' - 0&quot;</td>
<td>ST3.05 - C</td>
<td>ST3.05 - D OR ST3.05 - E</td>
<td>(2) - 33</td>
<td>(2) - 33</td>
<td>(2) - 33</td>
</tr>
<tr>
<td></td>
<td>16' - 0&quot;</td>
<td>ST3.05 - C</td>
<td>ST3.05 - D OR ST3.05 - E</td>
<td>(2) - 54</td>
<td>(2) - 54</td>
<td>(2) - 43</td>
</tr>
<tr>
<td>&gt;4' - 0&quot; TO &lt;10' - 0&quot;</td>
<td>9' - 0&quot;</td>
<td>ST3.05 - C</td>
<td>ST3.05 - D OR ST3.05 - E</td>
<td>(1) - 54 OR (2) - 33</td>
<td>(1) - 54 OR (2) - 33</td>
<td>(1) - 43 OR (2) - 33</td>
</tr>
<tr>
<td></td>
<td>12' - 0&quot;</td>
<td>ST3.05 - C</td>
<td>ST3.05 - D OR ST3.05 - E</td>
<td>(2) - 43 OR (3) - 33</td>
<td>(2) - 43 OR (3) - 33</td>
<td>(2) - 33</td>
</tr>
<tr>
<td></td>
<td>16' - 0&quot;</td>
<td>ST3.05 - C</td>
<td>ST3.05 - D OR ST3.05 - E</td>
<td>(3) - 54</td>
<td>(2) - 54</td>
<td>(2) - 43</td>
</tr>
<tr>
<td>1.26 - 1.45</td>
<td>9' - 0&quot;</td>
<td>ST3.05 - C</td>
<td>ST3.05 - D OR ST3.05 - E</td>
<td>(2) - 43 OR (3) - 33</td>
<td>(2) - 43 OR (3) - 33</td>
<td>(2) - 33</td>
</tr>
<tr>
<td></td>
<td>12' - 0&quot;</td>
<td>ST3.05 - C</td>
<td>ST3.05 - D OR ST3.05 - E</td>
<td>(3) - 54</td>
<td>(2) - 54</td>
<td>(2) - 43</td>
</tr>
<tr>
<td></td>
<td>16' - 0&quot;</td>
<td>ST3.05 - C</td>
<td>ST3.05 - D OR ST3.05 - E</td>
<td>(3) - 54</td>
<td>(3) - 54</td>
<td>(2) - 43</td>
</tr>
</tbody>
</table>

**Notes:**
1. See general notes on ST0.00, ST0.01 & ST0.02 for light gauge steel requirements and detail ST1.01 for section profiles.
2. Studs shall match wall sizes, i.e., 3625 for 3 5/8" wall, 4005 for 4" wall & 6005 for 6" wall.
3. Schedule for sill based on 4' - 0" max ht. For sills taller than 4' - 0" use header framing.
4. See ST3.00 for design assumptions.
UNPUNCHED STD. TRACK SEE SCHEDULE ON ST3.00

(1) #10 S.M.S.
  12" O.C. FOR WALL
  MIN. @ EA. SIDE
  @ EA. STUD

(2) ROWS OF #10 S.M.S.
  4" O.C. FOR WALL
  HEIGHT ≥ 12'

IN LIEU OF SCREWS

1/16
2-12

ALTERNATE

#10 S.M.S. EA. SIDE
@ 16" O.C.

OPTIONAL: USE 33 MIL. UNPUNCHED TRACK, WIDTH TO MATCH STUD WIDTH, TO ENCLOSE STUD

ALTERNATE:
IN LIEU OF STUD & TRACK USE WELDED STUD.

A HEADER AT OPENING 4'-0" MAX

NOTE:
1. ATTACHMENT OF CEILING, EQUIPMENT, ETC. TO THE HEADER OR STUDS ABOVE THE HEADER IS NOT PERMITTED WITHOUT THE APPROVAL OF THE RDP IN RESPONSIBLE CHARGE & OSHPD.

B HEADER AT OPENING 4'-0" TO 10'-0" MAX

3 5/8" MIN. WALL STUD PER SCHEDULE ON ST2.01

UNPUNCHED STD. TRACK SEE SCHEDULE ON ST3.01

(1) #10 S.M.S.
  MIN. @ EA. SIDE
  @ EA. STUD

STUD HEADER SEE SCHEDULE ON ST3.01

(2) ROWS OF #10 S.M.S.
  @ 4" O.C.
  TOP & BOTTOM, STAGGERED

IN LIEU OF SCREWS

1/16
2-12

STANDARD PARTITION WALL DETAILS

HEADER SECTION

ST3.02
SILL AT OPENING 4'-0" MAX

OPTIONAL: USE UNPUNCHED 33 MIL TRACK SILL, WIDTH TO MATCH STUD WIDTH, TO ENCLOSE STUD.

ALTERNATE:
IN LIEU OF TRACK & STUD USE WELDED STUD.

SILL AT OPENING 4'-0" TO 10'-0" MAX
NOTES:
1. WHERE (2) STUDS ARE INDICATED ON PLANS OR ELEVATIONS, USE DOUBLE STUD DETAIL A OR B ABOVE. WHERE (3) STUDS ARE INDICATED ON PLANS OR ELEVATIONS, USE TRIPLE STUD DETAIL C OR D ABOVE.
2. FOR STUD THICKNESSES, SEE SCHEDULE ON ST3.00 & ST3.01.
CUT TRACK FLANGE & BEND WEB TO FORM 1 1/4" RETURN AT TOP OF HEADER

CRIPPLE WALL STUD

#10 S.M.S. TYP. HEADER, SEE SCHEDULE ON ST3.00

CUT STUD FLANGE & BEND WEB TO FORM 1 1/4" RETURN AT BOTTOM OF HEADER

SILL, SEE SCHEDULE ON ST3.00

CUT TRACK FLANGE & BEND WEB. SEE HEADER CONDITION.

A 4'-0" MAX OPENING WIDTH

JAMB STUD, SEE SCHEDULE ON ST3.00

CRIPPLE WALL STUD

(2) #10 S.M.S. TYP

#10 S.M.S. TYP

HEADER, SEE SCHEDULE ON ST3.00

IN LIEU OF S.M.S. AT CLIP TO JAMB & HEADER/ SILL, TYP

1/16 1 1/2

54 MIL 1 1/2"x1 1/2"x STUD WIDTH CLIP, TYP

SILL, SEE SCHEDULE ON ST3.00

(2) #10 S.M.S. EA. LEG, TYP

B 4'-0" MAX OPENING WIDTH

ALTERNATE CONNECTION

STANDARD PARTITION WALL DETAILS

HEADER & SILL CONNECTION TO JAMB STUDS (4'-0" MAX OPENING WIDTH)
CUT & BEND TRACK WEB TO FORM 1 1/4" RETURN AT TOP OF HEADER
(3) #10 S.M.S., TYP
CRIPPLE WALL STUD

HEADER, SEE SCHEDULE ON ST3.01, TYP

CUT & BEND STUD WEB TO FORM 1 1/4" RETURN AT BOTTOM OF HEADER
SILL, SEE SCHEDULE ON ST3.01

CUT & BEND TRACK WEB, SEE HEADER CONDITION. BOTTOM ONLY AT SILL

OPENING WIDTH 4'-0" TO 10'-0" MAX

(2) ROWS OF #10 S.M.S. @ 12" O.C.

DETAIL

JAMB STUD, SEE SCHEDULE ON ST3.01

CRIPPLE STUD AND TRACK TIGHT AGAINST HEADER ABOVE

(3) #10 S.M.S.

FOR OPENING WIDTH 4'-0" TO 10'-0" MAX
ALTERNATE CONNECTION 2 - AT DOOR HEADERS

OPENING WIDTH 4'-0" TO 10'-0" MAX
ALTERNATE CONNECTION 1
METAL STUD LATERAL BRACING TYPE 1 – OPTION 1

1-1/2" x 2" x 54 MIL CLIP ANGLE W/ (2) #8 S.M.S. EA LEG

METAL STUD LATERAL BRACING TYPE 1 – OPTION 2

NOTES:
1. LATERAL BRACING IS NOT REQUIRED WHERE GYP. BOARD IS INSTALLED ON BOTH SIDES OF PARTITION WALL.
2. NOTCHING OR CUTTING OF COLD-ROLLED CHANNEL IS NOT PERMITTED FOR ANY CONDITION.
2"x4.3 MIL CONT. STRAP
@ SIDES WITH NO
SHEATHING. SPACING
PER ST2.06.

TRACK BLOCKING TO MATCH
SIZE & THICKNESS OF VERT.
STUDS. LOCATE @ EA. END OF
WALL AND AT 8'-0" O.C. MAX
BETWEEN. INSTALL WITH NO GAP
BETWEEN ENDS OF BLOCKING &
VERTICAL STUD, SEE PLAN.

PLAN

(1) #8 S.M.S. @ EA.
STUD TYP. WHERE
STRAP OCCURS

2"x4.3 MIL CONT. STRAP
@ SIDES WITH NO
SHEATHING. SPACING
PER ST2.06.

(2) #8 S.M.S. @ EA. SIDE OF SPlice

(3) #8 S.M.S. TOTAL EACH FACE OF
BLOCKING @ SPlice, (2) #8 S.M.S. IF
STRAP IS NOT SPliced.

METAL STUD LATERAL BRACING TYPE 2

NOTES:
1. LATERAL BRACING IS NOT REQUIRED WHERE GYP. BOARD IS INSTALLED ON BOTH SIDES OF PARTITION WALL.
2. NOTCHING OF BLOCKING OR STRAP IS NOT PERMITTED FOR ANY CONDITION.
BACKING PLATE DETAIL TYPE 1

NOTES:
1. BACKING, CONNECTION TO STUD, AND STUDS FOR CABINETS OR EQUIPMENT EXCEEDING THIS LIMIT SHALL BE DESIGNED AND DETAILED BY RDP IN RESPONSIBLE CHARGE.
2. ST5.01 MAY BE USED FOR ATTACHMENT OF CABINETS OR EQUIPMENT DISTRIBUTING LESS THAN 20# PER STUD (CENTER OF GRAVITY LESS THAN 6" FROM FACE OF STUD).
3. NOTCHING OR CUTTING OF BACKING PLATE IS NOT PERMITTED EXCEPT AS SHOWN.

Office of Statewide Health Planning & Development
FACILITIES DEVELOPMENT DIVISION

REVIEWED IN ACCORDANCE WITH THE REQUIREMENTS OF T34, COR
APPROVED

2010 CBC
SECTION TITLE:
STANDARD PARTITION WALL DETAILS
SHEET TITLE:
BACKING PLATE DETAIL TYPE 1

ISSUE DATE: 01/06/12
OPD NO: ST5.00

REVISION: DATE:
BACKING PLATE DETAIL TYPE 2

NOTES:
1. THIS DETAIL MAY BE USED FOR ATTACHMENT OF CABINETS OR EQUIPMENT DISTRIBUTING LESS THAN 20# PER STUD (CENTER OF GRAVITY LESS THAN 8" FROM FACE OF STUD).
2. SEE ST5.00 FOR ALTERNATE WELDING OPTION.
3. NOTCHING OR CUTTING OF BACKING PLATE IS NOT PERMITTED.

REVIEWED IN ACCORDANCE WITH THE REQUIREMENTS OF T24, COR
APPROVED

Office of Statewide Health Planning & Development
FACILITIES DEVELOPMENT DIVISION

AGENCY STAMP

CODE:
2010 CBC

SECTION TITLE:
STANDARD PARTITION WALL DETAILS

SHEET TITLE:
BACKING PLATE DETAIL TYPE 2
CABINET OR EQUIPMENT BASE (BY OTHERS)

(3) 16d PREDRILLED OR (3) #8 WOOD SCREWS PREDRILLED

CONCRETE (LWC OR NWC)

CABINET OR EQUIPMENT (BY OTHERS)

PROVIDE 2x4x1'-0" long where cabinet or equipment base does not accommodate expansion anchors

MIN. EMBED PER ST1.03.

(2) 3/8" EXPANSION ANCHORS OR (2) 3/8" SCREW ANCHORS

ANCHOR DETAIL

ANCHOR LAYOUT OPTION - 1

NOTE:
1. SEE ST1.03 & ST1.04 FOR EXPANSION ANCHOR REQUIREMENTS, AND SEE ST1.09 & ST1.10 FOR SCREW ANCHOR REQUIREMENTS.
CUT TOP & BOTTOM FLANGES OF TRACK AT EACH STUD, TYP.

MIN. 6"x54 MIL UNPUNCHED BACKING TRACK. DO NOT CUT FLANGES BETWEEN SUPPORTING STUDS.

PARTITION WALL STUDS @ 16" O.C. MAX PER SCHEDULE, SEE ST2.01

1/16" 1" MIN.

IN LIEU OF SCREWS

(3) #10 S.M.S.

@ EA. END OF BACKING TRACK

@ EA. STUD

250# GRAB BAR LOAD APPLIED IN ANY DIRECTION

A ISOMETRIC DETAIL

BACKING PLATE DETAIL FOR GRAB BAR

NOTES:
1. NOTCHING OR CUTTING OF BACKING PLATE IS NOT PERMITTED EXCEPT AS SHOWN.
## TOP CONNECTION CONDITIONS – PARTIAL HEIGHT PARTITION WALL

### STRUCTURE ABOVE TOP TRACK

<table>
<thead>
<tr>
<th>Light Weight (Min. 3000 PSI) Concrete Filled Metal Deck</th>
<th>ST6.04</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal Weight (Min. 3000 PSI) Concrete Slab or Beam Soffit</td>
<td>ST6.05</td>
</tr>
<tr>
<td>Concrete Pan Joist or Waffle Slab System</td>
<td>ST6.06</td>
</tr>
<tr>
<td>Metal Roof Deck Without Concrete Fill</td>
<td>ST6.07</td>
</tr>
<tr>
<td>Steel Beam</td>
<td>ST6.08 &amp; ST6.09</td>
</tr>
<tr>
<td>Wood Framing</td>
<td>ST6.10</td>
</tr>
</tbody>
</table>

### PARTIAL HEIGHT PARTITION WALL–BRACE TO STRUCTURE CONNECTION

**NOTES:**

1. SEE ST6.02 & ST6.03 FOR TYPICAL DETAILS OF CEILING HEIGHT PARTITION WALLS WITH A TOP TRACK CONNECTION BRACED TO THE STRUCTURE ABOVE. SEE ST6.01 FOR BRACE SPACING, SIZE AND CONNECTION SCHEDULE.
2. SEE ST7.00 FOR FULL HEIGHT PARTITION WALLS.
3. FOR TOP & BOTTOM CONNECTION DEMAND SCHEDULE SEE ST6.11.

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**2010 CBC**

**SECTION TITLE:** STANDARD PARTITION WALL DETAILS

**SHEET TITLE:** TOP CONNECTION CONDITIONS – PARTIAL HEIGHT PARTITION WALL

**ISSUE DATE:** 01/06/12

**OPD NO.:** ST6.00
### PARTIAL HEIGHT PARTITION WALL BRACE SPACING, SIZE AND CONNECTION SCHEDULES

#### PARTITION WALL CONDITION 'A'

**DETAIL ST6.02**

<table>
<thead>
<tr>
<th>Sd</th>
<th>MAX BRACE SPACING (FT)</th>
<th>3 5/8&quot;</th>
<th>4&quot;</th>
<th>6&quot;</th>
<th>BOTTOM OF BRACE (TO TOP TRACK)</th>
<th>TOP OF BRACE (AT CONNECTION TO STRUCTURE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25-0.99</td>
<td>10</td>
<td>43</td>
<td>43</td>
<td>43</td>
<td>(4) #10 S.M.S.</td>
<td>(4) #10 S.M.S.</td>
</tr>
<tr>
<td>1.00-1.25</td>
<td>9.33</td>
<td>54</td>
<td>43</td>
<td>43</td>
<td>(5) #10 S.M.S. OR (4) #12 S.M.S.</td>
<td>(4) #10 S.M.S.</td>
</tr>
<tr>
<td>1.26-1.45</td>
<td>8.75</td>
<td>54</td>
<td>54</td>
<td>43</td>
<td>(5) #10 S.M.S.</td>
<td>(4) #10 S.M.S.</td>
</tr>
<tr>
<td>1.46-1.95</td>
<td>7</td>
<td>54</td>
<td>43</td>
<td></td>
<td>(6) #10 S.M.S. OR (5) #12 S.M.S.</td>
<td>(4) #10 S.M.S.</td>
</tr>
</tbody>
</table>

#### PARTITION WALL CONDITION 'B'

**DETAIL ST6.02**

<table>
<thead>
<tr>
<th>Sd</th>
<th>MAX BRACE SPACING (FT)</th>
<th>3 5/8&quot;</th>
<th>4&quot;</th>
<th>6&quot;</th>
<th>BOTTOM OF BRACE (TO TOP TRACK)</th>
<th>TOP OF BRACE (AT CONNECTION TO STRUCTURE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25-0.99</td>
<td>8</td>
<td>54</td>
<td>54</td>
<td>43</td>
<td>(5) #10 S.M.S.</td>
<td>(4) #10 S.M.S.</td>
</tr>
<tr>
<td>1.00-1.25</td>
<td>7</td>
<td>54</td>
<td>54</td>
<td>43</td>
<td>(6) #10 S.M.S. OR (5) #12 S.M.S.</td>
<td>(4) #10 S.M.S.</td>
</tr>
<tr>
<td>1.26-1.45</td>
<td>6.5</td>
<td>54</td>
<td>54</td>
<td></td>
<td>(6) #10 S.M.S. OR (5) #12 S.M.S.</td>
<td>(4) #10 S.M.S.</td>
</tr>
<tr>
<td>1.46-1.95</td>
<td>5.33</td>
<td>54</td>
<td></td>
<td>54</td>
<td>(6) #10 S.M.S. OR (5) #12 S.M.S.</td>
<td>(4) #10 S.M.S.</td>
</tr>
</tbody>
</table>

#### PARTITION WALL CONDITION 'C' AND 'D'

**DETAIL ST6.03**

<table>
<thead>
<tr>
<th>Sd</th>
<th>MAX BRACE SPACING (FT)</th>
<th>BRACE SIZE AND MIL (2) 3 5/8&quot; BACK TO BACK</th>
<th>NUMBER OF S.M.S. AT TOP AND BOTTOM OF BRACE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25-0.99</td>
<td>6.67</td>
<td>43</td>
<td>(8) #10 S.M.S.</td>
</tr>
<tr>
<td>1.00-1.25</td>
<td>6</td>
<td>54</td>
<td>(8) #10 S.M.S.</td>
</tr>
<tr>
<td>1.26-1.45</td>
<td>5.5</td>
<td>54</td>
<td>(8) #10 S.M.S.</td>
</tr>
<tr>
<td>1.46-1.95</td>
<td>4.5</td>
<td>54</td>
<td>(8) #10 S.M.S.</td>
</tr>
</tbody>
</table>

**NOTES:**

1. THESE TABLES ARE BASED ON THE FOLLOWING DESIGN CRITERIA:
   A. DEMAND LOADS PER ST6.11.
   B. 9 FT MAX PARTITION WALL HEIGHT.
   C. 12 FT MAX BRACE LENGTH.
2. RDP IN RESPONSIBLE CHARGE SHALL DESIGN FOR OTHER CONDITIONS.
PARTIAL HEIGHT PARTITION WALL

NOTES:
1. SEE TOP & BOTTOM CONNECTION DEMAND SCHEDULE ON ST6.11.
2. SEE ST2.00 FOR DEFINITION OF PARTITION WALL CONDITIONS.
3. DETAIL APPLIES TO PARTITION WALL CONDITIONS 'A' & 'B', ALL S3S
   CATEGORIES.
PARTIAL HEIGHT PARTITION WALL

NOTES:
1. SEE TOP & BOTTOM CONNECTION SCHEDULE ON ST6.11.
2. SEE ST2.00 FOR DEFINITION OF PARTITION WALL CONDITIONS.
3. DETAIL APPLIES TO PARTITION WALL CONDITIONS 'C' & 'D', ALL SRS CATEGORIES.
BRACE PERPENDICULAR TO FLUTE OF DECK

A

EXPANSION ANCHOR PER TABLE BELOW TYP

1/4" MIN. EDGE DIST. & 3/4" MIN. SPACING BETWEEN SCREWS, TYP

SECTION

3/4" MIN EDGE DISTANCE TO END OF BRACE, 1/4" MAX GAP FROM END OF BRACE TO TRACK

B

BRACE PARALLEL TO FLUTE OF DECK

SECTION

54 MIL MIN TRACK TO MATCH BRACE SIZE W/ DEEP LEG PER ST1.00.

EXPANSION ANCHOR PER TABLE BELOW TYP

BRACE ANCHORAGE TO CONCRETE FILLED METAL DECK

<table>
<thead>
<tr>
<th>Sds</th>
<th>PARTITION WALL TYPE</th>
<th>EXPANSION ANCHOR QUANTITY, SIZE AND EMBED</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25 TO 1.95</td>
<td>CONDITION 'A' &amp; 'B'</td>
<td>(2) 3/8&quot;Ø WITH 2&quot; EMBED</td>
</tr>
<tr>
<td>0.25 TO 1.95</td>
<td>CONDITION 'C' &amp; 'D'</td>
<td>(2) 1/2&quot;Ø WITH 3 1/4&quot; EMBED</td>
</tr>
</tbody>
</table>

NOTES:
1. SEE TOP & BOTTOM CONNECTION DEMAND SCHEDULE ON ST6.11.
2. SEE ST1.03 & ST1.04 FOR EXPANSION ANCHOR REQUIREMENTS.
3. DETAIL APPLIES TO ALL PARTITION WALL CONDITIONS & ALL Sds CATEGORIES.

REVIEWED IN ACCORDANCE WITH THE REQUIREMENTS OF TSC, CON APPROVED

Office of Statewide Health Planning & Development
FACILITIES DEVELOPMENT DIVISION

STANDARD PARTITION WALL DETAILS

SECTION TITLE:
BRACE CONNECTION TO CONCRETE FILLED METAL DECK - ALL PARTITION WALL CONDITIONS

ISSUE DATE: 01/06/12
OPD NO.: ST6.04
BRACE TO CONC. SLAB OR BEAM SOFFIT

BRACE ANCHORAGE TO CONCRETE SLAB OR BEAM SOFFIT

<table>
<thead>
<tr>
<th>50s</th>
<th>PARTITION WALL TYPE</th>
<th>EXPANSION ANCHOR QUANTITY, SIZE AND EMBED</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25 TO 1.95</td>
<td>CONDITION ‘A’ &amp; ‘B’</td>
<td>(2) 3/8&quot;Ø WITH 2&quot; EMBED</td>
</tr>
<tr>
<td>0.25 TO 1.95</td>
<td>CONDITION ‘C’ &amp; ‘D’</td>
<td>(2) 1/2&quot;Ø WITH 3 1/4&quot; EMBED</td>
</tr>
</tbody>
</table>

NOTES:
1. SEE TOP & BOTTOM CONNECTION DEMAND SCHEDULE ON ST6.11.
2. SEE ST1.03 & ST1.04 FOR EXPANSION ANCHOR REQUIREMENTS.
3. DETAIL APPLIES TO ALL PARTITION WALL CONDITIONS & ALL 50s CATEGORIES.
CONCRETE WAFFLE SLAB OR PAN JOIST SYSTEM

1. MAINTAIN EDGE DISTANCE
ANCHOR SPACING REQUIRED
FOR FASTENER
PER ST1.03

68 MIL CLIP ANGLE TO BRACE
PER SCHEDULE ON ST6.01

DIAGONAL BRACE PER SCHEDULE
ON ST6.01 & DETAILS ON ST6.02
& ST6.03. DOUBLE BRACE
WHERE OCCURS

NORMAL WEIGHT CONCRETE
(MINIMUM 3000 PSI)

(2) 1/2"Ø EXPANSION ANCHOR
WITH 2" EMBED

DIAGONAL BRACE
PARALLEL TO WAFFLE SLAB OR PAN JOIST

DIAGONAL BRACE
PERPENDICULAR TO WAFFLE SLAB OR PAN JOIST

SECTION

NOTES:
1. SEE TOP CONNECTION DEMAND SCHEDULE ON ST6.11.
2. SEE ST1.03 & ST1.04 FOR EXPANSION ANCHOR REQUIREMENTS.
3. RDP IN RESPONSIBLE CHARGE SHALL VERIFY LOADS IMPOSED ON JOISTS.
4. PRIOR TO ANCHOR INSTALLATION, REINFORCING/PRESTRESSING BAR LOCATIONS SHALL BE DETERMINED BY NON-DESTRUCTIVE TESTING.
5. DETAIL APPLIES TO ALL PARTITION WALL CONDITIONS & ALL SPS CATEGORIES.

2010 CBC
STANDARD PARTITION WALL DETAILS
BRACE CONNECTION TO CONCRETE PAN JOIST OR WAFFLE SLAB SYSTEM
- ALL PARTITION WALL CONDITIONS
NOTES:
1. RDP IN RESPONSIBLE CHARGE TO PROVIDE CALCULATION FOR OSHPD REVIEW JUSTIFYING THE ABILITY OF METAL DECK TO SUPPORT THE REACTIONS FROM BRACE. SEE TOP CONNECTION DEMAND SCHEDULE ON ST6.11 FOR BRACE REACTIONS.
2. THIS DETAIL IS APPLICABLE ONLY FOR PARTITION WALL CONDITIONS 'A' & 'B', ALL S6S CATEGORIES.
3. RDP IN RESPONSIBLE CHARGE TO EVALUATE PARTITION WALL BRACING FOR CONDITIONS 'C' & 'D', ALL S6S CATEGORIES.
**PERPENDICULAR TO STEEL BEAM**

**BRACE PARALLEL TO STEEL BEAM**

**SECTION**

**NOTES:**

1. **SEE TOP CONNECTION DEMAND SCHEDULE ON ST6.11.**
2. **SEE ST1.05 FOR PAF REQUIREMENTS.**
3. **THIS DETAIL IS APPLICABLE ONLY FOR PARTITION WALL CONDITIONS 'A' & 'B', ALL SPS CATEGORIES.**
4. **STEEL BEAM FLANGE & WEB MINIMUM THICKNESS = 3/16".**
5. **RDP IN RESPONSIBLE CHARGE, IOR AND CONTRACTOR TO VERIFY THAT NO PDF IS INSTALLED IN THE PROTECTED ZONE OF ANY STEEL MEMBER, SEE ANSI/AISC 341–05, SECTION 7.4.**

**REVIEWED IN ACCORDANCE WITH THE REQUIREMENTS OF T24, OCR APPROVED**

**Office of Statewide Health Planning & Development**

**FACILITIES DEVELOPMENT DIVISION**

**2010 CBC**

**STANDARD PARTITION WALL DETAILS**

**BRACE CONNECTION TO STEEL BEAM - PARTITION WALL CONDITIONS 'A' & 'B'**
3/4" MIN EDGE DIST. & 3/4" MIN SPACING BETWEEN SCREWS

EA SIDE OF TRACK 1/16 3" MIN

STEEL BEAM

STEEL BEAM

54 MIL MIN TRACK TO MATCH BRACE SIZE W/ DEEP LEG PER ST1.00.

DIAGONAL BRACE PER SCHEDULE ON ST6.01 & DETAIL ST6.03

3/4" MIN EDGE DIST. & 3/4" MIN SPACING BETWEEN SCREWS

8"

WEB OF BRACE

BRACE PERPENDICULAR TO STEEL BEAM

C

BRACE PARALLEL TO STEEL BEAM

D

SECTION

1/16 3" MIN

STEEL BEAM FLANGE (3/16" MIN THICKNESS)

TRACK

NOTES:
1. SEE TOP CONNECTION DEMAND SCHEDULE ON ST6.11.
2. THIS DETAIL IS APPLICABLE FOR PARTITION WALL CONDITIONS 'C' & 'D', ALL S60 CATEGORIES. AS AN ALTERNATE TO ST6.08, THIS DETAIL CAN BE USED FOR ALL PARTITION WALL CONDITIONS.
3. STEEL BEAM FLANGE & WEB MINIMUM THICKNESS = 3/16".
4. RDP IN RESPONSIBLE CHARGE, IOR AND CONTRACTOR TO VERIFY THAT NO WELD IS INSTALLED IN THE PROTECTED ZONE OF ANY STEEL MEMBER, SEE ANSI/ASCE 341-05, SECTION 7.4.

REVIEWED IN ACCORDANCE WITH THE REQUIREMENTS OF T24, CDR APPROVED

Office of Statewide Health Planning & Development FACILITIES DEVELOPMENT DIVISION

CODE:
2010 CBC

SECTION TITLE:
STANDARD PARTITION WALL DETAILS

SHEET TITLE:
BRACE CONNECTION TO STEEL BEAM, PARTITION WALL CONDITIONS 'C' & 'D'

ISSUE DATE: 01/06/12

OPD NO: ST6.09
(5) 8d NAILS - OMIT IF ADJACENT BLOCKING IS USED

3/4" MIN EDGE DISTANCE TO END OF BRACE,
1/4" MAX GAP FROM END OF BRACE TO TRACK.

PLYWOOD SHEATHING

WEB OF BRACE
4x6 BLK'G (FLAT) WITH SIMPSON A34
OR EQ. @ EA. SIDE @ EA. END.

JOIST, TYP

IN LIEU OF NAILS THRU SHEATHING ABOVE
DIAG. BRACE, ADD 4x6 BLK'G
EA. SIDE OF BRACE.
SNUG FIT W/ SIMPSON A34 OR EQ.
@ EA. SIDE
@ EACH END.

3/4" MIN.
TYP

3/4" MIN. EDGE DIST. & 3/4" MIN.
SPACING BETWEEN SCREWS, TYP.

54 MIL MIN. TRACK TO MATCH BRACE SIZE W/ DEEP
LEG PER ST1.01 W/ (6) #14"x3" WOOD SCREWS INTO
BLOCKING FOR COND. 'A' & 'B'. (8) #14"x3" WOOD
SCREWS INTO BLOCKING FOR COND. 'C' & 'D'.

DIAGONAL BRACE PER SCHEDULE ON
ST6.01 & DETAILS ON ST6.02 & ST6.03.
DOUBLE STUD WHERE OCCURS.

A BRACE PERPENDICULAR TO JOIST ABOVE

3/4" MIN EDGE DISTANCE TO END OF BRACE, 1/4" MAX GAP FROM END OF BRACE TO TRACK.

PLYWOOD SHEATHING

4x6 BLK'G EA SIDE
W/ SIMPSON A34
OR EQ. @ EA. SIDE
@ EA. END WITHIN
12" OF BRACE

WEB OF
BRACE, TYP

JOIST BEYOND

3/4" MIN.
TYP

3/4" MIN. EDGE DIST. & 3/4" MIN.
SPACING BETWEEN SCREWS, TYP.

OPTION WHERE BRACE ALIGNS W/ JOIST
(10" MAX HORIZ SKEW)

FOR TRACK SEE DETAIL A.

DIAGONAL BRACE PER SCHEDULE ON ST6.01.
DETAILS ON ST6.02 & ST6.03.

B BRACE PARALLEL TO JOIST ABOVE

NOTES:
1. SEE TOP CONNECTION DEMAND SCHEDULE ON ST6.11.
2. DETAIL APPLIES TO ALL PARTITION WALL CONDITIONS & ALL Sds CATEGORIES.

REVIEWED IN ACCORDANCE WITH THE REQUIREMENTS OF T24, COR
APPROVED

Office of Statewide Health Planning & Development
Facilities Development Division

CODE:
2010 CBC

SECTION TITLE:
STANDARD PARTITION WALL DETAILS

SHEET TITLE:
BRACE CONNECTION TO WOOD FRAMING - ALL PARTITION WALL CONDITIONS

ISSUE DATE: 01/06/12

OPD NO: ST6.10
## TOP AND BOTTOM CONNECTION DEMAND SCHEDULES

### TOP AND BOTTOM CONNECTION DEMANDS (PARTITION WALL CONDITION 'A')

<table>
<thead>
<tr>
<th>$S_{DS}$</th>
<th>Seismic Reaction at the Top &amp; Bottom Connection for Different Wall Height (LBS/FT)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9 FT</td>
</tr>
<tr>
<td>0.25–0.99</td>
<td>17</td>
</tr>
<tr>
<td>1.00–1.25</td>
<td>22</td>
</tr>
<tr>
<td>1.26–1.45</td>
<td>26</td>
</tr>
<tr>
<td>1.46–1.95</td>
<td>34</td>
</tr>
</tbody>
</table>

### TOP AND BOTTOM CONNECTION DEMANDS (PARTITION WALL CONDITION 'B')

<table>
<thead>
<tr>
<th>$S_{DS}$</th>
<th>Seismic Reaction at the Top &amp; Bottom Connection for Different Wall Height (LBS/FT)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9 FT</td>
</tr>
<tr>
<td>0.25–0.99</td>
<td>BOTTOM</td>
</tr>
<tr>
<td>1.00–1.25</td>
<td>TOP</td>
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<tr>
<td>1.26–1.45</td>
<td>BOTTOM</td>
</tr>
<tr>
<td>1.46–1.95</td>
<td>TOP</td>
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</table>

### TOP AND BOTTOM CONNECTION DEMANDS (PARTITION WALL CONDITION 'C')

<table>
<thead>
<tr>
<th>$S_{DS}$</th>
<th>Seismic Reaction at the Top &amp; Bottom Connection for Different Wall Height (LBS/FT)</th>
</tr>
</thead>
<tbody>
<tr>
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<td>9 FT</td>
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<tr>
<td>0.25–0.99</td>
<td>BOTTOM</td>
</tr>
<tr>
<td>1.00–1.25</td>
<td>TOP</td>
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<tr>
<td>1.26–1.45</td>
<td>BOTTOM</td>
</tr>
<tr>
<td>1.46–1.95</td>
<td>TOP</td>
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</table>

### TOP AND BOTTOM CONNECTION DEMANDS (PARTITION WALL CONDITION 'D')

<table>
<thead>
<tr>
<th>$S_{DS}$</th>
<th>Seismic Reaction at the Top &amp; Bottom Connection for Different Wall Height (LBS/FT)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9 FT</td>
</tr>
<tr>
<td>0.25–0.99</td>
<td>BOTTOM</td>
</tr>
<tr>
<td>1.00–1.25</td>
<td>TOP</td>
</tr>
<tr>
<td>1.26–1.45</td>
<td>BOTTOM</td>
</tr>
<tr>
<td>1.46–1.95</td>
<td>TOP</td>
</tr>
</tbody>
</table>

### NOTES:

1. Connection demands are provided to allow RDP in responsible charge to verify non-pre-approved components of the framing system and the supporting structure.
2. See ST2.02 for typical partition wall sections.
3. Loads given in PLF multiply by appropriate brace spacing for reactions.
<table>
<thead>
<tr>
<th>STRUCTURE ABOVE TOP TRACK</th>
<th>FULL HEIGHT PARTITION WALL—TOP TRACK TO STRUCTURE CONNECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIGHT WEIGHT (MIN. 3000 PSI) CONCRETE FILLED METAL DECK</td>
<td>ST7.02 &amp; ST7.03</td>
</tr>
<tr>
<td>NORMAL WEIGHT (MIN. 3000 PSI) CONCRETE SLAB OR BEAM SOFFIT</td>
<td>ST7.02 &amp; ST7.03</td>
</tr>
<tr>
<td>CONCRETE PAN JOIST OR WAFFLE SLAB SYSTEM</td>
<td>ST7.03, ST7.05 &amp; ST7.06</td>
</tr>
<tr>
<td>METAL ROOF DECK WITHOUT STRUCTURAL CONCRETE FILL</td>
<td>ST7.07</td>
</tr>
<tr>
<td>STEEL BEAM</td>
<td>ST7.08</td>
</tr>
<tr>
<td>WOOD FRAMING</td>
<td>ST7.09</td>
</tr>
</tbody>
</table>

NOTES:
1. SEE ST7.01 THROUGH ST7.10 FOR TYPICAL DETAILS OF FULL HEIGHT PARTITION WALLS WITH A TOP TRACK CONNECTION DIRECTLY TO THE STRUCTURE ABOVE.
2. SEE ST6.00 FOR PARTIAL HEIGHT PARTITION WALLS.
3. FOR TOP & BOTTOM CONNECTION DEMAND SCHEDULE SEE ST6.11.
NOTES:
1. DO NOT CONNECT OUTER TRACK TO INNER TRACK OR STUDS (DETAIL A ONLY).
2. DO NOT CONNECT WALL FINISH TO OUTER TRACK (DETAILS A & B).
3. GAP 'X' - BY RDP IN RESPONSIBLE CHARGE, 1/2" MIN. TO 3/4" MAX.
4. RDP IN RESPONSIBLE CHARGE TO VERIFY "UL" RATING FOR HEAD OF WALL ASSEMBLY. APPROVED FIRE RESISTANT ASSEMBLY REQUIRED.
5. DETAIL B TO BE USED WHERE ONLY VERTICAL SLIP REQUIRED. WHERE HORIZONTAL, IN-PLANE SLIP IS REQUIRED, USE DETAIL A, DO NOT USE DETAIL B. DO NOT USE DETAIL B FOR ST7.08.
6. SEE TOP CONNECTION DEMAND SCHEDULE ON ST6.11.
7. LATERAL BRACING ONLY REQUIRED IF GYP BOARD IS NOT FULL HEIGHT ON BOTH SIDES OF PARTITION WALL SEE ST2.06, ST4.00 & ST4.01.
8. DETAIL APPLIES TO ALL PARTITION WALL CONDITIONS & ALL $S_{E5}$ CATEGORIES.
1. See Top Connection Demand Schedule on ST6.11.
2. See ST7.01 & ST7.02 for PAF requirements.
3. See ST7.10 for connection at Jamb location.
4. See ST2.01 for Partition Wall Stud Schedule.
5. Detail applies to all partition wall conditions & all Sp categories.

ANCHORAGE TO CONC. FILLED METAL DECK
(FUTES PARALLEL TO WALL)

NOTES:

Office of Statewide Health Planning & Development
AGENCY STAMP

CODE:
2010 CBC

SECTION TITLE:
STANDARD PARTITION WALL DETAILS

SHEET TITLE:
TOP TRACK CONNECTION TO LWC FILLED METAL DECK & NWC SLAB
- ALL PARTITION WALL CONDITIONS

ISSUE DATE: 01/06/12
OPS NO: ST7.02
LWC (MIN 3000 PSI) FILLED METAL DECK
OR NWC (MIN 3000 PSI) W/ t MIN=4"
WHERE t < 4 1/2"
USE EXPANSION ANCHOR
W/ 1 1/2" EMBED
TOP TRACK
PER ST7.01 W/ (2) #10 S.M.S. INTO Z-CLIP,
SEE NOTE 1.
FIRE PROOFING
WHERE OCCURS
4" APART W/ 1 1/4" EMBED TO BOTTOM
FLUTE OF DECK CENTERED IN FLUTE. Z-CLIP
SHALL BE SPACED PER SCHEDULE ON ST7.04.

ANCHORAGE TO CONC. SLAB & FILLED
METAL DECK W/ FIREPROOFING
(FLUTES PERPENDICULAR TO PARTITION WALL)

LWC (MIN 3000 PSI)
FILLED METAL DECK
FIRE PROOFING
WHERE OCCURS

(2) PAF SPACED
1 1/4" EMBED TO BOTTOM FLUTE
OF DECK CENTERED IN FLUTE.
Z-CLIP SHALL BE SPACED PER SCHEDULE ON ST7.04.

ANCHORAGE TO CONC. FILLED
METAL DECK W/ FIREPROOFING
(FLUTES PARALLEL TO PARTITION WALL)

NOTES:
1. SEE TOP CONNECTION DEMAND SCHEDULE ON ST6.11.
2. SEE ST1.01 & ST1.02 FOR PAF REQUIREMENTS.
3. SEE ST7.10 FOR CONNECTION AT JAMB LOCATION.
4. SEE ST2.01 FOR PARTITION WALL PARTITION STUD SCHEDULE.
5. DETAIL APPLIES TO ALL PARTITION WALL CONDITIONS & ALL S&D CATEGORIES.

REVIEWED IN ACCORDANCE WITH
THE REQUIREMENTS OF TC4. DCIR
APPROVED

Office of Statewide Health
Planning & Development
FACILITIES DEVELOPMENT DIVISION

CODE:
2010 CBC
SECTION TITLE:
STANDARD PARTITION WALL DETAILS
SHEET TITLE:
TOP TRACK CONNECTION TO LWC FILLED
METAL DECK & NWC SLAB W/
FIREPROOFING—ALL PARTITION WALL CONDITIONS

ISSUE DATE: 01/06/12
OPD NO.: ST7.03
**PARTITION WALL CONDITION 'A'*

| Sd/
WALL HEIGHT | 9 FT | 12 FT | 16 FT |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25-0.99</td>
<td>48</td>
<td>42</td>
<td>30</td>
</tr>
<tr>
<td>1.00-1.25</td>
<td>48</td>
<td>36</td>
<td>24</td>
</tr>
<tr>
<td>1.26-1.45</td>
<td>42</td>
<td>30</td>
<td>24</td>
</tr>
<tr>
<td>1.46-1.95</td>
<td>30</td>
<td>24</td>
<td>18</td>
</tr>
</tbody>
</table>

For detail B through D (strap or Z-clip) double the spacing indicated up to 48” OC.

**PARTITION WALL CONDITION 'B'*

| Sd/
WALL HEIGHT | 9 FT | 12 FT | 16 FT |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25-0.99</td>
<td>36</td>
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<td>1.00-1.25</td>
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<tr>
<td>1.26-1.45</td>
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<td>18</td>
<td>18</td>
</tr>
<tr>
<td>1.46-1.95</td>
<td>18</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>

For detail B through D (strap or Z-clip) double the spacing indicated up to 48” OC.

**PARTITION WALL CONDITION 'C'*

| Sd/
WALL HEIGHT | 9 FT | 12 FT | 16 FT |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25-0.99</td>
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<td>1.00-1.25</td>
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<tr>
<td>1.26-1.45</td>
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<td>6</td>
</tr>
<tr>
<td>1.46-1.95</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

For detail B through D (strap or Z-clip) double the spacing indicated up to 48” OC.

**PARTITION WALL CONDITION 'D'*

| Sd/
WALL HEIGHT | 9 FT | 12 FT | 16 FT |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25-0.99</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>1.00-1.25</td>
<td>6</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>1.26-1.45</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>1.46-1.95</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

For detail B through D (strap or Z-clip) double the spacing indicated up to 48” OC.

**NOTES:**

1. See ST7.02 & ST7.03 for details A, B, C, & D.
2. Values in tables above represent maximum spacing. Decrease spacing as req'd to coordinate w/ metal deck flute spacing. Where PAF spacing is less than 12” OC, OK to provide multiple PAF at low flutes as required. Maintain edge distance and spacing requirements per ST1.01 & ST1.02.
(1) PAF W/ 1" EMBED
2 1/2" x .33 MIL METAL STUD
FOR INFILL/SHAFT WALL AS REQ'D
3 1/2" MIN
4 1/2" MAX
600S137-33 W/ (2) PDF
W/ 1" EMBED @ EA. END (4) TOTAL.
600S137-33 SHALL BE LOCATED @ 32"
O.C. MAX FOR PARTITION CONDITION 'A'
& 'B' OR 16" O.C. MAX FOR PARTITION
CONDITION 'C' & 'D'.

CUP FLANGES & FOLD WEBS
43 MIL TRACK TOP
& BOTTOM W/ #8
S.M.S. TO EA. SIDE
SHAFT WALL STUDS
TOP TRACK
PER ST7.01,
SEE NOTE 1

(2) #10 S.M.S.

ANCHORAGE TO CONC. WAFFLE SLAB

(1) PAF W/ 1" EMBED @ 12" MAX O.C.
FOR PART CONDITION 'A' & 'B' @ 6" MAX
O.C. FOR PART CONDITION 'C' & 'D'

TOP TRACK
PER ST7.01,
SEE NOTE 1

ANCHORAGE FOR PARTITION WALL PARALLEL TO CONC. PAN JOIST

NOTES:
1. SEE TOP CONNECTION DEMAND SCHEDULE ON ST6.11.
2. SEE ST1.01 & ST1.02 FOR PAF REQUIREMENTS.
3. SEE ST2.00 FOR TYPICAL PARTITION WALL CONDITIONS.
4. SEE ST2.01 FOR PARTITION WALL STUD SCHEDULE.
5. DETAIL APPLIES TO ALL PARTITION WALL CONDITIONS & ALL S05 CATEGORIES.
ANCHORAGE FOR PARTITION WALL PERPENDICULAR TO CONC. PAN JOIST

ANCHORAGE FOR PARTITION PERP. TO CONC. PAN JOIST

<table>
<thead>
<tr>
<th>PARTITION TYPE</th>
<th>CONDITION 'A'</th>
<th>CONDITION 'B'</th>
<th>CONDITIONS 'C' &amp; 'D'</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9 FT</td>
<td>12 FT</td>
<td>16 FT</td>
</tr>
<tr>
<td>0.25–0.99</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>1.00–1.25</td>
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<td>✔</td>
<td>–</td>
</tr>
<tr>
<td>1.26–1.45</td>
<td>✔</td>
<td>✔</td>
<td>–</td>
</tr>
<tr>
<td>1.46–1.95</td>
<td>✔</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

✔ DETAIL D CAN BE USED FOR THIS CONDITION
- DETAIL D CAN NOT BE USED FOR THIS CONDITION

NOTES:
1. SEE TOP CONNECTION DEMAND SCHEDULE ON ST6.11.
2. SEE ST1.01 & ST1.02 FOR PAF REQUIREMENTS.
3. SEE ST2.00 FOR TYPICAL PARTITION WALL CONDITIONS.
4. SEE ST2.01 FOR PARTITION WALL PARTITION STUD SCHEDULE.
5. DETAIL APPLIES TO ALL PARTITION WALL CONDITIONS & ALL SD6 CATEGORIES.
TOP TRACK PER ST7.01 W/ (2) #10 S.M.S. INTO Z-CLIP, SEE NOTE 1

33 MIL MIN. BARE METAL DECK

FIRE PROOFING WHERE OCCURS. FOR METAL DECK W/O FIRE PROOFING 54 MIL x 4" FLAT STRAP CAN BE USED IN LIEU OF Z-CLIP.

TO BOTTOM FLUTE OF DECK:
- 32" O.C. PART. WALL CONDITION 'A' & 'B'
- 16" O.C. MAX PART. WALL CONDITION 'C' & 'D'

PARTITION WALL STUD @ 16" O.C. MAX
PER SCHEDULE SEE ST2.01

A. ANCHORAGE TO METAL ROOF DECK
(FLUTES PARALLEL TO PARTITION WALL)

54 MIL W/ (2) #10 S.M.S.

33 MIL MIN. BARE METAL DECK

FIRE PROOFING WHERE OCCURS. FOR METAL DECK W/O FIRE PROOFING 54 MIL x 4" FLAT STRAP CAN BE USED IN LIEU OF Z-CLIP.

TORQUED FLATHEAD SCREW W/ (2) #10 S.M.S.

PARTITION WALL STUD @ 16" O.C. MAX
PER SCHEDULE ST2.01

B. ANCHORAGE TO METAL ROOF DECK
(FLUTES PERPENDICULAR TO PARTITION WALL)

NOTES:
1. SEE TOP CONNECTION DEMAND SCHEDULE ON ST6.11.
2. RDP IN RESPONSIBLE CHARGE TO EVALUATE STEEL DECK FOR CAPACITY.
3. SEE ST2.00 FOR TYPICAL PARTITION WALL CONDITIONS.
4. CONNECTION SPACING SHOWN ABOVE REPRESENTS MAXIMUM SPACING. DECREASE SPACING AS REQ'D TO COORDINATE W/ METAL DECK FLUTE SPACING.
5. DETAIL APPLIES TO ALL PARTITION WALL CONDITIONS & ALL S85 CATEGORIES.

AGENCY STAMP:
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STANDARD PARTITION WALL DETAILS
ISSUE DATE: 01/05/12
OPD NO.: ST7.07

SECTION TITLE:
TOP TRACK CONNECTION TO METAL ROOF DECK WITHOUT CONCRETE FILL
ALL PARTITION WALL CONDITIONS

REVIEWED IN ACCORDANCE WITH THE REQUIREMENTS OF T14, CCR
APPROVED
Office of Statewide Health Planning & Development
FACILITIES DEVELOPMENT DIVISION
TOP TRACK PER ST7.01 W/ (2) #10 S.M.S. INTO Z-CLIP, SEE NOTE 1 & 5 IF USING VERTICALLY SLOTTED TOP TRACK PER DETAIL B ON ST7.01, DO NOT INSTALL SCREWS THROUGH SLOTTED TRACK AND PROVIDE LATERAL BRACING PER ST4.01 OR ST4.02 WITHIN 18" OF THE TOP OF THE WALL.

NOTES:
1. SEE TOP CONNECTION DEMAND SCHEDULE ON ST6.11.
2. SEE ST1.05 FOR PAF REQUIREMENTS.
3. DETAIL APPLIES TO ALL PARTITION WALL CONDITIONS & ALL Sx CATEGORIES.
4. RDP IN RESPONSIBLE CHARGE, IOR AND CONTRACTOR TO VERIFY THAT NO PDF IS INSTALLED IN THE PROTECTED ZONE OF ANY STEEL MEMBER, SEE ANSI/ASC 341-05, SECTION 7.4.
5. IN-PLANE SLIP REQUIRED.

PARTITION WALL CONDITION 'A' & 'B'

<table>
<thead>
<tr>
<th>Sx/ WALL HEIGHT</th>
<th>Z-CLIP SPACING (INCHES O.C.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>0.25-1.95</td>
<td>48</td>
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</table>

PARTITION WALL CONDITION 'C' & 'D'

<table>
<thead>
<tr>
<th>Sx/ WALL HEIGHT</th>
<th>Z-CLIP SPACING (INCHES O.C.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9 FT</td>
</tr>
<tr>
<td>0.25-1.25</td>
<td>48</td>
</tr>
<tr>
<td>1.26-1.95</td>
<td>32</td>
</tr>
</tbody>
</table>
ROOF / FLOOR JOIST 48" O.C. MAX

TOP TRACK PER ST7.01 W/ (2) #10 WOOD SCREW INTO BLOCKING W/ 2" MIN. EMBED.
- 32" O.C. FOR PART. COND. 'A' & 'B';
- 16" O.C. FOR PART. COND. 'C' & 'D'
SEE NOTE 1.

4x6 BLK'G (FLAT) EA. SCREW
CONN. WITH SIMPSON A34
OR EQ. EA. SIDE EA. END.

PARTITION WALL STUD 16" O.C. MAX
PER SCHEDULE SEE ST2.01.

A PARTITION WALL PARALLEL TO JOIST ABOVE

ROOF / FLOOR JOIST 48" O.C. MAX

TOP TRACK PER ST7.01 W/ (1) #10 WOOD SCREW INTO EA. JOIST &
- 16" O.C. FOR PART. COND. 'A' & 'B';
- 8" O.C. FOR PART. COND. 'C' & 'D'
W/ 2" MIN. EMBED, SEE NOTE 1.

2X FULL HT. BLOCKING WITH SIMPSON A34
OR EQ. EA. SIDE EA. END, TYP.

PARTITION WALL STUD 16" O.C. MAX
PER SCHEDULE SEE ST2.01.

B PARTITION WALL PERPENDICULAR TO JOIST ABOVE

NOTES:
1. SEE TOP CONNECTION DEMAND SCHEDULE ON ST6.11.
2. DETAIL APPLIES TO ALL PARTITION WALL CONDITIONS & ALL S05 CATEGORIES.
### Structural Condition Above Top Track

<table>
<thead>
<tr>
<th>Structural Condition Above Top Track</th>
<th>Provide Add'l Top Track Conn at Jamb Using Detail Listed Below</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete Pan Joist or Waffle Slab System</td>
<td>ST7.05 or ST7.06</td>
</tr>
<tr>
<td>Metal Roof Deck Without Structural Concrete Fill</td>
<td>ST7.07</td>
</tr>
<tr>
<td>Steel Beam</td>
<td>ST7.08</td>
</tr>
<tr>
<td>Wood Framing</td>
<td>ST7.09</td>
</tr>
</tbody>
</table>

**NOTE:**
1. See ST1.01, ST1.02 & ST1.05 for PAF Requirements.
## BOTTOM CONNECTION SCHEDULE

<table>
<thead>
<tr>
<th>STRUCTURAL CONDITION BELOW BOTTOM TRACK</th>
<th>BOTTOM TRACK CONNECTION</th>
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<td>LWC FILLED METAL DECK OR NWC SLAB</td>
<td>STB.01</td>
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<td>WOOD FRAMING</td>
<td>STB.04</td>
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**NOTES:**
1. FOR PARTITION WALL CONDITION DESCRIPTION SEE ST2.00
2. FOR BOTTOM CONNECTION DEMAND SCHEDULE SEE ST6.11.
ALT - WHERE CONTINUOUS BOTTOM TRACK IS NOT USED:
2x2x54 MIL BENT PLATE @ EA. STUD
W/ FASTENER INTO SLAB, PER
SCHEDULE, W/ (2) #10 S.M.S. MIN. TO
STUD WEB

PAF, EXPANSION ANCHOR OR SCREW ANCHOR
PER SCHEDULE ON ST8.02 FOR LWC FILLED
METAL DECK OR ON ST8.03 FOR NWC SLAB,
MIN 3" FROM END OF TRACK.

WHERE CONTINUOUS BOTTOM TRACK IS USED:
(1) #10 S.M.S. MINIMUM @ EACH SIDE @ EACH
STUD, FASTENERS TO STRUCTURE PER SCHEDULE

A PARTITION WALL BOTTOM TRACK ANCHORAGE
LIGHT WEIGHT CONCRETE OVER METAL DECK OR NORMAL WEIGHT CONCRETE SLAB

NOTES:
1. SEE ST1.01 & ST1.02 FOR PAF REQUIREMENT AND ST1.03 & ST1.04 FOR EXPANSION ANCHOR REQUIREMENTS AND
   ST1.09 & ST1.10 FOR SCREW ANCHOR REQUIREMENTS.
2. SEE ST8.05 FOR ANCHORAGE @ JAMBS.
3. FOR LIGHT WEIGHT CONCRETE OVER METAL DECK, SEE ST8.02 FOR FASTENER TO SLAB SCHEDULE.
4. FOR NORMAL WEIGHT CONCRETE SLAB, SEE ST8.03 FOR FASTENER TO SLAB SCHEDULE.
5. SEE ST12.01 FOR PARTITION WALL STUD SCHEDULE.

REVIEWED IN ACCORDANCE WITH
THE REQUIREMENTS OF T.A. CCR
APPROVED

Office of Statewide Health
Planning & Development
FACILITIES DEVELOPMENT DIVISION

CODE:
2010 CBC

SECTION TITLE:
STANDARD PARTITION WALL DETAILS

SHEET TITLE:
BOTTOM TRACK CONNECTION TO
LWC ON METAL DECK OR NWC SLAB
- ALL PARTITION WALL CONDITIONS

ISSUE DATE: 01/06/12

OPD NO.: ST8.01
### Bottom Track Connection to LWC on Metal Deck Fastener Max Spacing Schedule

#### Bottom Connection Demands (Partition Wall Condition 'A')

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<th>3/8&quot; Exp Anchor W/ 2&quot; Emb.</th>
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#### Bottom Connection Demands (Partition Wall Conditions 'C' & 'D')

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**NOTES:**
1. SEE ST1.01 & ST1.02 FOR PAF REQUIREMENTS.
2. SEE ST1.03 & ST1.04 FOR EXPANSION ANCHOR REQUIREMENTS.
3. SEE ST1.09 & ST1.10 FOR SCREW ANCHOR REQUIREMENTS.
### Bottom Track Connection to NWC Slab Fastener Max Spacing Schedule

**Bottom Connection Demands (Partition Wall Condition 'A')**

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**Bottom Connection Demands (Partition Wall Conditions 'C' & 'D')**

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NOTES:
1. See ST1.01 & ST1.02 for PAF requirements.
2. See ST1.03 & ST1.04 for expansion anchor requirements.
3. See ST1.09 & ST1.10 for screw anchor requirements.
PARTITION WALL STUD @ 16" O.C. MAX PER SCHEDULE, SEE ST8.01
ALTERNATE: WHERE CONTINUOUS BOTTOM TRACK IS NOT USED, PROVIDE L2x2x54 MILx3" LONG BENT PL @ EA. STUD W/ (2) #10 S.M.S. TO STUD &
(1) #10 WOOD SCREW TO BLKG @ PART. COND. 'A' & 'B' OR L2x4x54 MILx3" LONG BENT PL W/ (4) #10 WOOD SCREWS TO JOIST @ PART. COND. 'C', SEE NOTE 5 BELOW.

PARTITION WALL PERPENDICULAR TO FLOOR JOIST

(1) #10 WOOD SCREW x 2" MIN. PENETRATION @18" O.C. @ PART. COND. 'A' & 'B'; 4" O.C. @ PART. COND. 'C' & 'D'. CENTER SCREW IN JOIST & STAGGER SCREWS. SEE NOTE 5 BELOW.

#10 WOOD SCREWS
@ 12" O.C. WITH 1" MIN. PENETRATION INTO BLOCKING,
(3) WOOD SCREWS MIN. TYP.

FLAT 2x4 BLOCKING @ 4'-0" O.C.
W/ (2) 10d TOE NAILS EA. END, ALTERNATE

MIN. DOUBLE FLOOR JOIST BELOW PARTITION

PARTITION WALL PARALLEL TO FLOOR JOIST

NOTES:
1. SEE ST8.01 FOR BALANCE OF INFORMATION.
2. SEE ST8.05 FOR BOTTOM CONNECTION @ JAMS.
3. RDF IN RESPONSIBLE CHARGE SHALL VERIFY ADEQUACY OF FRAMING.
4. SEE ST2.01 FOR PARTITION WALL STUD SCHEDULE.
5. VERIFY SCREWS ARE INSTALLED 1/2" MIN FROM THE END OF BLKG.

REVIEWED IN ACCORDANCE WITH THE REQUIREMENTS OF T34, CCR APPROVED

Office of Statewide Health Planning & Development
FACILITIES DEVELOPMENT DIVISION

CODE: 2010 CBC
SECTION TITLE: STANDARD PARTITION WALL DETAILS
SHEET TITLE: BOTTOM TRACK CONNECTION TO WOOD FRAMING - ALL PARTITION WALL CONDITIONS

ISSUE DATE: 01/06/12
REVISION: DATE: ST8.04
2x2x54 MILx6'-3" LONG
BENT PL CLIP WITH (2) #10
S.M.S. TO JAMB STUD WEB
OPENINGS > 4'-0" WIDE

BOTTOM TRACK CONNECTION TO STRUCUTRE SPACED PER SCHEDULES ON STB.02, STB.03 AND DETAIL STB.04.

BENT PLATE CLIP CONNECTION TO STRUCTURE PER SCHEDULE BELOW

<table>
<thead>
<tr>
<th>OPENING SIZE</th>
<th>JAMB STUD BOTTOM TRACK CONNECTION TYPE</th>
<th>CONNECTION TO STRUCTURE (THROUGH BENT PL CLIP OR THROUGH BOTTOM TRACK)</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 4'-0&quot;</td>
<td>BOTTOM TRACK CONNECTION TO STRUCTURE (NO CLIP REQUIRED)</td>
<td>(2) 0.145&quot;ø PAF</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1) 3/8&quot;ø x 2&quot; EMBED EXPANSION ANCHOR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1) 3/8&quot;ø x 2 1/2&quot; EMBED SCREW ANCHOR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2) #10 WOOD SCREWS</td>
</tr>
<tr>
<td>&gt;4'-0&quot; TO ≤ 10'-0&quot;</td>
<td>BENT PL CLIP CONNECTION TO STRUCTURE</td>
<td>(2) 0.145&quot;ø PAF</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1) 3/8&quot;ø x 2&quot; EMBED EXPANSION ANCHOR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1) 3/8&quot;ø x 2 1/2&quot; EMBED SCREW ANCHOR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(3) #10 WOOD SCREWS</td>
</tr>
</tbody>
</table>

NOTE:
1. BOTTOM CONNECTION @ JAMBS AT PARTITION WALL CONDITION 'A', ALL SPS CATEGORIES.

REVIEWED IN ACCORDANCE WITH
THE REQUIREMENTS OF T2A, CCR
APPROVED.

Office of Statewide Health Planning & Development
FACILITIES DEVELOPMENT DIVISION

CODE:
2010 CBC

SECTION TITLE:
STANDARD PARTITION WALL DETAILS

SHEET TITLE:
BOTTOM TRACK CONNECTION @ JAMBS - PARTITION WALL CONDITION 'A'

ISSUE DATE: 01/06/12

GPD NO. ST8.05
## Suspended Soffit Connection Schedule

<table>
<thead>
<tr>
<th>Structure Above Suspended Soffit</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete Slab, Beam or LWC Filled Metal Deck</td>
<td>ST9.02</td>
</tr>
<tr>
<td>Connection to Steel Beam</td>
<td>ST9.03</td>
</tr>
<tr>
<td>Concrete Pan Joist or Waffle System Slab System</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Metal Roof Deck without Concrete Fill System</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Wood Framing</td>
<td>NOT AVAILABLE</td>
</tr>
</tbody>
</table>

### Notes:
1. See ST9.01 for Suspended Soffit Detail.
2. See Soffit Loading Diagram Below. RDP in Responsible Charge to Design Connection and Check Supporting Framing for All Conditions Not Covered in These Details. Loads Shown at Allowable Stress Level.

---

**Diagram**: 279#/ft 279#/ft

**Dimensions**: 680# 680#

3'0" Max 7'-0" Max
DIAG. BRACE PER NOTE 1 @ 48" O.C. W/ (4) #10 S.M.S. @ EA. END. FOR 6'-0" < "L" < 10'-0" USE DOUBLE STUD PER DETAIL A.

(4) #10 S.M.S. @ DIAG BRACE TO VERT. STUD CONNECTION, TYP

DIAG. 1:1 CROSS 3" STRAP BRACING (MATCH STUD GAGE) W/ (2) #10 S.M.S. TO EA. STUD

CONT. STUD PER NOTE 1 W/ (2) #10 S.M.S. @ EA. STUD

STUDS PER NOTE 1 @ 16" O.C. W/ (2) #10 S.M.S. @ EACH STUD TO STUD CONNECTION

3'-0" MAX

7'-0" MAX

CONT. 400T125-43 FOR SDS ≤ 1.45, 400T125-54 FOR 1.45 < SDS ≤ 1.95 (2) #10 S.M.S. @ EA. STUD

SEE CONNECTION TO STRUCTURE ON ST9.02 & 9.03

ALTERNATE BRACE CONFIGURATION

1'-0" MAX DISTANCE

FINISHED CEILING

3'-0" MAX

USE MIN. 400T100-33 FOR SDS ≤ 1.45 & 400T100-43 FOR 1.45 < SDS ≤ 1.95

#10 S.M.S. @ 10" O.C. TYP.

A DOUBLE STUD BRACE

NOTES:
1. USE MIN 4" x 33 MIL STUDS (40OS137-33) FOR SDS ≤ 1.45 & 4" x 43 MIL (40OS137-43) FOR 1.45 < SDS ≤ 1.95
2. SUSPENDED SOFFITS ARE NOT DESIGNED TO SUPPORT ADJACENT HANGING OR FRAMED CEILINGS, EQUIPMENT OR CABINETS.
3. SEE ST9.03 & ST9.04 FOR EXPANSION ANCHOR REQUIREMENTS.
CONC. SLAB, SOFFIT OF CONCRETE BEAM OR METAL DECK W/ L.W.C. FILL PERPENDICULAR TO WALL

3/8"Ø EXPANSION ANCHORS W/ WASHER W/ 2" EMBED @ 16" O.C. (12" O.C. @ L.W.C. OVER METAL DECK) WITHIN 3" OF VERT. STUD, TYP. (CENTERED IN BOTTOM OF FLUTES @ L.W.C. OVER METAL DECK).

SOFFIT BELOW CONCRETE FRAMING OR PERPENDICULAR TO METAL DECK

400T125-54 W/ 3/8"Ø EXPANSION ANCHORS W/ WASHER W/ 2" EMBED @ 16" O.C. & WITHIN 3" OF VERT. STUD, TYP. SCREW THE TOP TRACK W/ (1) #10 MIN. S.M.S. @ EA LEG. (CENTERED IN BOTTOM OF FLUTES @ L.W.C. OVER METAL DECK).

SEE DETAIL C FOR ALTERNATE ANCHORING.

METAL DECK WITH L.W.C. CONC. FILL PARALLEL TO WALL

NOTES:
1. FOR REMAINDER OF WALL REQUIREMENTS SEE ST9.01.
2. SEE ST1.03 & ST1.04 FOR EXPANSION ANCHOR REQUIREMENTS.

SOFFIT PARALLEL TO METAL DECK

4"x3"x54MIL BENT PLATE W/ (2) 3/8"Ø EXPANSION ANCHORS W/ 2" EMBED. CENTER EXPANSION ANCHORS IN BOTTOM FLUTE WHERE DECK OCCURS.

4"x3"x54MIL BENT PLATE W/ (2) 3/8"Ø EXPANSION ANCHORS W/ WASHERS W/ 2" EMBED. CENTER EXPANSION ANCHORS IN BOTTOM FLUTE WHERE DECK OCCURS.

C) ALTERNATE CONNECTION DETAIL
CONNECT TO STRUCTURE PER ST9.02

(4) #10 S.M.S. Ø DIAG BRACE TO VERT. STUD CONNECTION

MIN. / MAX
PER RDP IN RESPONSIBLE
CHARGE (6" MAX)

FACE OF FLANGE

RDP IN RESPONSIBLE CHARGE TO
DETERMINE REQUIREMENTS FOR
BOTTOM FLANGE BRACING

SOFFIT TO BEAM ATTACHMENT:
OPTION 1: 400T100-54 W/ (4) #10
S.M.S. Ø EA. VERT. STUD.
OPTION 2: SEE B.

FINISHED CEILING

A

OPTION 1

4x2x54MIL BENT PLATE
W/ (4) #10 S.M.S. Ø EA.
VERT STUD

1/16

B

OPTION 2

NOTES:
1. FOR REMAINDER OF SOFFIT REQUIREMENTS SEE ST9.01.
2. SEE ST1.03 & ST1.04 FOR EXPANSION ANCHOR REQUIREMENTS.
3. SEE ST1.05 FOR PAF REQUIREMENTS.
4. RDP IN RESPONSIBLE CHARGE, IOR AND CONTRACTOR TO VERIFY THAT NO WELD IS INSTALLED IN THE PROTECTED ZONE OF ANY STEEL MEMBER, SEE ANSI/AISC 341-05, SECTION 7.4.

REVIEWED IN ACCORDANCE WITH THE REQUIREMENTS OF T24, OCR
APPROVED

Office of Statewide Health Planning & Development
FACILITIES DEVELOPMENT DIVISION

CODE:
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SECTION TITLE:
STANDARD PARTITION WALL DETAILS

SHEET TITLE:
SUSPENDED SOFFIT CONNECTION TO STEEL BEAM

ISSUE DATE: 01/06/12

OPD NO:
ST9.03