

LIGHT GAGE FRAMING			
MIL. THICKNESS -	STRUCTURAL GAGE NUMBER	CROSS REFERENCE	
20 GA	-----	33 MIL	
18 GA	-----	43 MIL	
16 GA	-----	54 MIL	
14 GA	-----	68 MIL	
12 GA	-----	97 MIL	

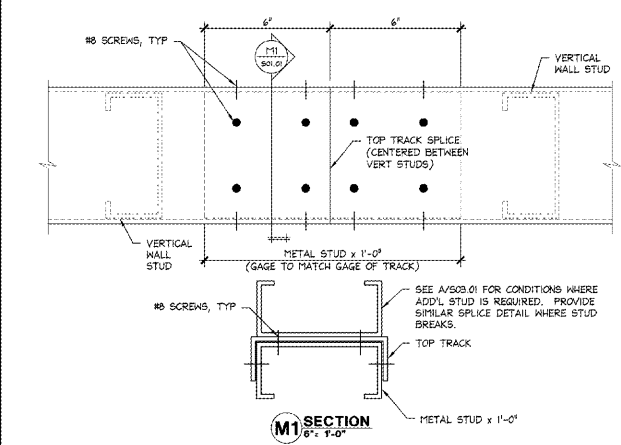
EXAMPLE CROSS REFERENCE:			
3 5/8"	18 GA STRUCTURAL METAL STUD	362 9/16"	48" METAL STUD
STUD DEPTH (T=TRACK)	FLANGE WIDTH	STUD THICKNESS	
+3.625"	+1.875"	+.048 MIL (18 GA.)	
+3 5/8"	+1 5/8"		

SEE GENERAL NOTES FOR LOCATIONS WHERE NON-STRUCTURAL AND STRUCTURAL STUDS ARE TO BE USED. TABLES ABOVE ARE A REFERENCE GUIDE FOR STRUCTURAL STUDS ONLY.

**LIGHT GAGE FRAMING SCREW CONNECTIONS**

UNLESS NOTED, LIGHT GAGE FRAMING CONNECTIONS SHALL BE MADE USING #8 SCREWS. SEE DETAIL A/S03.01 FOR DIAGONAL BRACING CONNECTIONS.

AT LOCATIONS WHERE SHEATHING MATERIAL IS PLACED AGAINST THE SCREW HEADS OF LIGHTGAGE METAL FRAMING CONNECTIONS, PANCAKE HEAD SCREWS SHALL BE USED SO THAT THE SHEATHING MATERIAL REMAINS STRAIGHT AND SMOOTH.



**TOP TRACK SPLICE STRUCT/ NON-STRUCTURAL STUDS**

CODED NOTES:		6" x 1'-0"	M
1) NOT USED	8) NOT USED	42DS01M2DETL	
2) NOT USED	9) NOT USED		
3) DBL 10" DP, 18 GA BEAM WITH 3 5/8", 18 GA TRACK TOP & BOTTOM	10) NOT USED	SEE DETAIL M/S03.02 FOR BOX BEAM STUD/ TRACK SPLICE DETAILS	
4) NOT USED	11) NOT USED		
5) NOT USED	12) NOT USED		
6) NOT USED	13) NOT USED		
7) NOT USED	14) NOT USED		
	15) DOUBLE 3 5/8", 20 GA LITEL WITH 3 5/8", 20 GA TRACK AT BOTTOM. SEE G/S03.01 FOR DETAILS AND ATTACHMENTS.		
	16) BUILT-UP BOX COLUMN - DBL 3 5/8" DP, 20 GA STUDS WITH 3 5/8", 20 GA TRACK, EA SIDE. SEE H/S03.01 FOR BEAM CONNECTION AND BRACING.		
	17) NOT USED		

**STRUCTURAL NOTES:**

- CONTROLLING BUILDING CODE: 2012 NORTH CAROLINA BUILDING CODE SEISMIC DESIGN CATEGORY C
- STRUCTURAL COLD FORMED METAL FRAMING
  - ALL STOREFRONT FRAMING SHOWN IN STRUCTURAL SECTIONS (S02.01 DRAWINGS) AND AS NOTED STRUCTURAL SHALL CONFORM TO THE REQUIREMENTS OF THIS SECTION.
  - COLD FORMED STEEL FRAMING SHALL CONFORM TO REQUIREMENTS OF THE CURRENT EDITION OF AISI SPECIFICATION FOR DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS.
  - ALL MEMBERS SHALL BE FORMED FROM CORROSION-RESISTANT STEEL (GRADE 33 UNLESS OTHERWISE SPECIFIED) AND THEN ZINC COATED PER ASTM A653, GRADE G-60.
  - ALL COLD FORMED MEMBERS SHALL COME FROM A SINGLE MANUFACTURER, "CLAMP-DITCH" OR EQUAL. THE INSTALLATION SHALL COMPLY WITH THE MANUFACTURER'S RECOMMENDATIONS.
  - DESIGN BASED ON  $F_y = 33$  KSI FOR MEMBERS 48 MILS AND LIGHTER  $F_y = 50$  KSI FOR MEMBERS 54 MILS AND HEAVIER.
  - ALL STOREFRONT FRAMING SHOWN IN THE STRUCTURAL SECTIONS SHALL HAVE 1/8" FLANGES AND WEB DEPTHS AS INDICATED ON THE DRAWINGS.
  - TRACK BLOCKING IN WALLS AND CEILING SHOWN IN THE ARCHITECTURAL DRAWINGS SUCH AS F/A12.01, ETC SHALL BE 18 GA (43 MIL) WITH 1 1/4" FLANGES.
  - SEE SECTION L/S03.01 FOR DEEP LEG DEFLECTION TRACK DETAILS
  - BASE TRACKS SHALL BE SET ON SMOOTH AND LEVEL CONCRETE OR NON-SHRINK GROUT SUCH AS "MASTERFLOW 787" BY MASTER BUILDERS.
  - FASTENING OF COMPONENTS SHALL BE WITH SELF-DRILLING CADMIUM PLATED OR ZINC COATED SCREWS (UNLESS NOTED). SCREWS SHALL BE OF SUFFICIENT SIZE TO ENSURE THE STRENGTH OF THE CONNECTION.
  - SEE DETAIL S/S03.01 FOR ADDITIONAL SCREW REQUIREMENTS.
  - SPLICES IN FRAMING COMPONENTS OTHER THAN TOP AND BOTTOM WALL TRACK ARE NOT PERMITTED.
  - STUDS SHALL BE INSTALLED SO THE ENDS ARE POSITIONED AGAINST THE INSIDE OF THE RUNNER TRACK WEB PRIOR TO FASTENING AND SHALL BE ATTACHED TO BOTH FLANGES OF THE UPPER AND LOWER RUNNER TRACKS, WITH (1)-#8 SCREW IN EACH FLANGE OF EACH STUD, UNLESS NOTED.
  - ATTACH BOTTOM TRACKS WITH 0.157" DIA POWDER ACTUATED FASTENERS (HILTI X-U, ICC ESR-2248 OR EQUIVALENT) AT 18" O.C., TYP U.N.
- NON-STRUCTURAL COLD FORMED METAL FRAMING
  - ALL INTERIOR FRAMING NOT COVERED IN STRUCTURAL LIGHTGAGE FRAMING SECTION SHALL COMPLY WITH THIS SECTION.
  - COLD FORMED STEEL FRAMING SHALL CONFORM TO REQUIREMENTS OF THE CURRENT EDITION OF THE AMERICAN IRON AND STEEL INSTITUTE PUBLICATION "NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL FRAMING - NONSTRUCTURAL MEMBERS", EXCEPT AS OTHERWISE SHOWN OR SPECIFIED.
  - FRAMING MEMBERS SHALL COMPLY WITH ASTM C 646 FOR CONDITIONS INDICATED. STEEL SHEET COMPONENTS SHALL COMPLY WITH ASTM C 446 AND PROTECTIVE COATING SHALL COMPLY WITH ASTM A 653 G40 OR HAVE EQUIVALENT THAT PROVIDES EQUIVALENT CORROSION RESISTANCE. AAO GALVALUMATED PRODUCTS ARE NOT ACCEPTABLE.
  - FRAMING SHALL HAVE A MINIMUM THICKNESS OF 0.019 INCHES (17 KSI MINIMUM YIELD STRENGTH) OR 0.030 INCHES (33 KSI MINIMUM YIELD STRENGTH).
  - FRAMING SHALL HAVE 1 1/4" FLANGES UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
  - FRAMING BASIS OF DESIGN (C/DIETRICH PROCESS) MARKING ARE V18R 20, 30 MIL, 33 KSI DRINKING WATER. IF ALSO ACCEPTED FOR OTHER USES, IF SUBSTITUTIONS ARE REQUESTED BY CONTRACTORS, THEY ARE RESPONSIBLE FOR PROVING THE SUBSTITUTION IS AN EQUIVALENT TO THE BASIS OF DESIGN. THIS INCLUDES PROVIDING LOADS, STRENGTHS, AND STIFFNESS DATA THAT MEET OR EXCEED THE UNBRACED HEIGHTS AND IN THE NON-COMPLETE TABLES OF THE BASIS OF DESIGN STUDS AS WELL AS PROVIDING DATA THAT INDICATES SCREW CONNECTIONS #8 SCREWS MEET THE PUBLISHED VALUES OF BASIS OF DESIGN STUDS.

1. SEE SECTION L/S03.01 FOR DEEP LEG DEFLECTION TRACK DETAILS

2. BASE TRACKS SHALL BE SET ON SMOOTH AND LEVEL CONCRETE OR NON-SHRINK GROUT SUCH AS "MASTERFLOW 787" BY MASTER BUILDERS.

3. FASTENING OF COMPONENTS SHALL BE WITH SELF-DRILLING CADMIUM PLATED OR ZINC COATED SCREWS (UNLESS NOTED). SCREWS SHALL BE OF SUFFICIENT SIZE TO ENSURE THE STRENGTH OF THE CONNECTION.

4. SEE DETAIL H/S03.01 FOR ADDITIONAL SCREW REQUIREMENTS.

5. SPLICES IN FRAMING COMPONENTS OTHER THAN TOP AND BOTTOM WALL TRACK ARE NOT PERMITTED. SEE DETAIL M/S03.01 FOR SPLICES IN TOP WALL TRACK.

6. ATTACH BOTTOM TRACKS WITH 0.157" DIA POWDER ACTUATED FASTENERS (HILTI X-U OR EQUIVALENT) AT 18" O.C., TYP U.N.

7. STUDS SHALL BE INSTALLED SO THE ENDS ARE POSITIONED AGAINST THE INSIDE OF THE RUNNER TRACK WEB PRIOR TO FASTENING AND SHALL BE ATTACHED TO BOTH FLANGES OF THE UPPER AND LOWER RUNNER TRACKS, WITH (1)-#8 SCREW IN EACH FLANGE OF EACH STUD, UNLESS NOTED.

D. STRUCTURAL STEEL

- STRUCTURAL STEEL SHALL CONFORM TO THE AISI "SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", CURRENT EDITION.
- WELDED CONNECTIONS SHALL CONFORM TO THE CURRENT REVISED CODE OF THE AMERICAN WELDING SOCIETY, AWS D1.1, WELDING ELECTRODES SHALL BE E70XX, LOW HYDROGEN.
- BOLTS AND BOLTED CONNECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A500,  $F_y = 50$  KSI. STEEL TUBE SHALL CONFORM TO THE REQUIREMENTS OF ASTM A500, GRADE B,  $F_y = 46$  KSI. STEEL PIPE SHALL CONFORM TO THE REQUIREMENTS OF ASTM A501,  $F_y = 36$  KSI. ALL OTHER STEEL SHAPES, PLATES, ETC., SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36,  $F_y = 36$  KSI.

**SEISMIC DESIGN CATEGORIES A, B & C**

**LIGHT GAGE METAL FRAMING - NON-STRUCTURAL AND STRUCT STUDS**

02.01.16 R

**CODED NOTES**

02.01.16

**STRUCTURAL SPECIFICATIONS**

02.01.16 C

**TABLE 1**  
STUD SIZE MATRIX FOR ALL INTERIOR PARTITIONS EXCEPT AS NOTED IN TABLES 2 & 3

STUDS FOR SEISMIC DESIGN CATEGORIES A, B & C ONLY					
STUD DESIGNATION	STUD DEPTH	FLANGE WIDTH	MIN THICKNESS	STUD SPACING	MAX WALL HEIGHT SPANNING FROM FLOOR TO BRACING
3 5/8" NON-STRUCT STUD	3 5/8"	1 1/4"	0.019"	16"	15'-4"
6" NON-STRUCT STUD	6"	1 1/4"	0.030"	16"	19'-0"

**TABLE 2**  
STUD SIZE MATRIX FOR UNIT 6 & UNIT 7 CABINET WALLS

SEISMIC DESIGN CATEGORIES A, B & C.					
FULL HEIGHT VERTICAL STUDS SHALL BE 3 5/8" NON-STRUCTURAL STUDS WITH 1 1/4" FLANGED @ 18" O.C. MAX. INSTALL DIAGONAL BRACING AT APPROXIMATELY 11'-0" A.F.F. AS SHOWN IN THESE SECTIONS					

**TABLE 3**  
STUD SIZE MATRIX FOR PARTITIONS THAT SUPPORT FLOOR MOUNTED STOCKROOM SHELVING

SEISMIC DESIGN CATEGORIES A, B & C.					
SEE DRAWING S03.02					

NOTE: FOR ALL THREE TABLES ABOVE, AT LOCATIONS WHERE SHELVING OCCURS ON EACH SIDE OF SINGLE STUD WALL, REDUCE THE STUD SPACING SHOWN IN THE TABLES ABOVE BY ONE-HALF, AND REDUCE THE DIAGONAL SPACING SHOWN IN DETAIL M/S03.01 BY ONE-HALF.

- NOTES:
- DESIGN BASIS IS ON ALLOWABLE DEFLECTION OF L/200.
  - PROVIDE HORIZONTAL BRACING @ 18" O.C. FOR FULL HEIGHT OF WALL PER DETAIL R/S03.01.
  - DESIGN BASIS ON 15' MAX. H. 5 PSF LATERAL LOAD, OR LATERAL SEISMIC LOAD, WHICHEVER.
  - CONTROL JOINTS SHALL BE PROVIDED FOR UP TO (2) LAYERS OF 5/8" THK GYPSUM BOARD ON EACH SIDE OF METAL STUDS.
  - SEE A/S03.01 FOR DIAGONAL BRACING DETAILS.

**SEISMIC DESIGN CATEGORIES A, B & C**

**STUD SIZE MATRIX - NON STRUCTURAL AND STRUCTURAL STUDS**

02.01.16 N



**LOCATION PLAN**

3/16" x 1'-0" A

104.01.2445.01  
**BATH & BODY WORKS**  
CHARLOTTE PREMIUM OUTLETS  
5404 NEW FASHION WAY  
SPACE NO. 240  
CHARLOTTE, NC 28278

PROJECT INFORMATION:  
SIS PKG 2  
191504.03  
3103121

SCORE: BBW ES/WBC  
DESIGN TYPE: NEW  
LBS&C PROJECT #:  
501.037928  
PACKAGE GENERATION:  
1/4 E PROJECT #:

REVISIONS:  
DATE ISSUED: 03/13/18  
DESIGNED BY: TBA  
DRAWN BY: TBA  
CHECKED BY: NES

ELITE CONSTRUCTION GROUP  
LAKE JACKSON, TX  
PHONE: 978-285-5172  
NOTE: THESE PRINTS HAVE BEEN REDUCED BY 20 PERCENT. SCALE WILL BE 50 PERCENT OF WHAT IS NOTED ON THESE

**STRUCTURAL SPECIFICATIONS AND NOTES**

DRAWING NUMBER:  
**S01.01**