

SUPERIOR TRUSS & PANEL, INC.

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DESIGN / BUILD SYSTEM

AN ALL LIGHT GAUGE STEEL STRUCTURE

STANDARD SPECIFICATIONS FOR LIGHT GAUGE STEEL WALL, FLOOR & ROOF FRAMING COMPONENT SYSTEMS AND INSTALLATION:

A. TYPICAL LOAD BEARING WALL STUD SPECIFICATION SECTION 05400:

1. FIRST FLOOR:

SINGLE STORY BUILDING	18 GAUGE 1 5/8 X 6 STUDS 16" O.C.
TWO STORY BUILDING	16 GAUGE 1 5/8 X 6 STUDS 16" O.C.
THREE STORY BUILDING	14 GAUGE 1 5/8 X 6 STUDS 16" O.C.
FOUR STORY BUILDING	12 GAUGE 1 5/8 X 6 STUDS 16" O.C.

2. SECOND FLOOR:

TWO STORY BUILDING	18 GAUGE 1 5/8 X 6 STUDS 16" O.C.
THREE STORY BUILDING	16 GAUGE 1 5/8 X 6 STUDS 16" O.C.
FOUR STORY BUILDING	14 GAUGE 1 5/8 X 6 STUDS 16" O.C.

3. THIRD FLOOR:

THREE STORY BUILDING	18 GAUGE 1 5/8 X 6 STUDS 16" O.C.
FOUR STORY BUILDING	16 GAUGE 1 5/8 X 6 STUDS 16" O.C.

4. FOURTH FLOOR:

FOUR STORY BUILDING	18 GAUGE 1 5/8 X 6 STUDS 16" O.C.
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NOTE: FIVE STORY BUILDING WILL BE SIZED UPON REVIEW OF YOUR PLANS WITH OUR STRUCTURAL ENGINEERS.

B. TYPICAL LOAD BEARING (EXTERIOR & INTERIOR) WALL ASSEMBLIES:

- ALL EXTERIOR WALLS WILL BE DESIGNED AT A DEFLECTION CRITERIA OF L/600.
- 1 1/4" X 6" TOP & BOTTOM TRACK THE SAME GAUGE AS THE STUDS WILL ATTACHED TO STUDS USING SELF TAPING LOW PROFILE SCREWS
- MID-POINT HORIZONTAL BRIDGING WILL BE 1 1/2" 16 GAUGE CRC CHANNEL ATTACHED WITH CLIPS AND SCREWS. 1 ROW OF BRIDGING FOR WALLS 6'-0" TO 9' 0" TALL. ADDITIONAL BRIDGING WILL BE ADDED TO WALLS THAT EXCEED 9'-0" .
- LIGHT GAUGE STEEL STRUCTURAL HEADERS WILL BE SET TIGHT TO THE TOP TRACK OF THE WALL PANEL WITH A BUILD DOWN TO CREATE THE ROUGH OPENING. ' TRADE READY' "C" SHAPED HEADERS MAYBE SUBSTITUTED FOR THE BOX HEADERS. CLOSED HEADERS WILL BE FILLED WITH BATT INSULATION AT TIME OF FABRICATION. HEADER SIZE & GAUGE WILL BE DETERMINED DURING THE DESIGN ENGINEERING AND SHOP DRAWING PROCESS.
- EXTERIOR WALL CORNERS ARE CONSTRUCTED WITH THE THREE STUD CALIFORNIA CORNER. ONE STUD AT EACH END OF EACH EXTERIOR PANEL AND A THIRD STUD PLACED ON THE INSIDE OF ONE PANEL TO PROVIDE INSIDE DRYWALL BACKING.
- MULTIPLE STUDS WILL BE USED AT ALL ROUGH OPENINGS AND BEAM POSTS. THE NUMBER OF STUDS USED WILL BE DETERMINED DURING THE DESIGN ENGINEERING PROCESS.
- CLOSED BEAM POSTS OR JAMB STUDS WILL BE INSULATED DURING MANUFACTURING.

8. 2 X WOOD BUCK' S (OPTIONAL) WILL BE APPLIED TO ALL EXTERIOR ROUGH OPENINGS THAT WILL RECEIVE WINDOWS AND DOORS.
9. 5/8" EXTERIOR TYPE "X" GYPSUM SHEATHING WILL BE APPLIED TO EXTERIOR WALL PANELS WITH PNEUMATIC PINS.
10. METAL WALL TIES WILL BE USED TO CONNECT THE TOP TRACK OF EACH WALL PANEL TO FORM A CONTINUES WALL SYSTEM.
11. EXTERIOR WALL DESIGN ASSUMES AN 20 PSF LATERAL LOAD WITH AN L/600 DELECTION CRITERIA.
12. ALL EXTERIOR AND INTERIOR LOAD BEARING WALLS ARE DESIGNED AND STAMPED BY A STRUCTURAL ENGINEER REGISTERED IN THE STATE THAT OUR DESIGN BUILD SERVICE IS PROVIDED.

C. TYPICAL SHEAR WALL ASSEMBLIES:

1. SHEAR WALL STUDS, TOP AND BOTTOM TRACK WILL BE THE SAME GAUGE LISTED UNDER LOAD BEARING WALL STUD SPECIFICATION.
2. LIGHT GAUGE STEEL FLAT STRAPING WILL BE ATTACHED TO THE TRACK AND STUDS AT A 45-DEGREE ANGLE. THE FLAT STRAP WILL BE ATTACHED TO EACH SIDE OF THE WALL PANEL TO CREATE AN "X" SHAPE. THE WIDTH AND GAUGE OF THE FLAT STRAP, AND THE CONNECTION TO THE STUDS AND TRACK WILL BE DETERMINED DURING DESIGN ENGINEERING.
3. MID-POINT HORIZONTAL BRIDGING WILL BE 1 ½" 16 GAUGE CRC CHANNEL ATTACHED WITH CLIPS AND SCREWS. 'TRADE READY' HORIZONTAL BRIDGING MAY BE SUBSTITUTED.
4. DOUBLE STUDS WILL BE PROVIDED AT EACH END OF SHEAR WALL FOR THE HOLD DOWN CONNECTION.
5. HOLD DOWN ANCHORS AND BOLTS WILL PROVIDED AT EACH END OF THE SHEAR WALL. HOLD DOWN SIZE, TYPE, AND CONNECTIONS DETAILS WILL BE DETERMINED AFTER A COMPLETE STRUCTURAL REVIEW OF THE PROJECT.
6. ALL SHEAR WALL ASSEMBLIES WILL BE DESIGNED AND STAMPED BY A REGISTERED STRUCTURAL ENGINEER FOR THE STATE OUR WHERE OUR DESIGN BUILD SERVICE IS PROVIDED.

D. TYPICAL INTERIOR NON-LOAD BEARING WALLS:

1. ALL INTERIOR WALLS WILL BE FIELD BUILT USING 25 GAUGE STUDS 16" O.C., WITH A 1 ¼" BOTTOM TRACK AND A SLIP TRACK AT THE TOP OF ALL FULL HEIGHT WALLS.
2. ALL INTERIOR HEADERS WILL HAVE A SINGLE TRACK AT THE ROUGH OPENING WITH FILLER STUDS @ 16" O.C. BETWEEN THE TOP TRACK AND THE HEADER TRACK.
3. STUD SIZES FOR THE INTERIOR WALLS WILL FOLLOW THE SIZES SHOWN ON THE ARCHITECTURAL DRAWINGS
4. INTERIOR BACKING FOR GRAB BARS, CABINETS, HAND RAILS, AND OTHER WALL MOUNTED ITEMS WILL BE PROVIDED BY OTHERS.
5. NO DRYWALL BACKING WILL BE PROVIDED FOR INTERSECTING WALLS. INTERSECTING WALLS WILL BE HELD BACK 5/8" SO DRYWALL CAN BE RUN BEHIND THE INTERSECTING WALL.

E. TYPICAL PREFABRICATED "C" STUD FLOOR PANELS:

1. FLOORS DESIGNED FOR RESIDENTIAL AREAS 40# LIVE & 10# DEAD LOAD WITH A DEFLECTION CRYTERIA OF L/360. FLOOR JOISTS WILL BE "C" SHAPED AND CONNECTED TO A LIGHT GAUGE STEEL RIM JOIST WITH #10 SELF-TAPPING LOW PROFILE SCREWS. THE JOISTS AND RIM MAY BE A 'TRADE READY' PRODUCT DEPENDING ON THE PROJECT REQUIREMENTS.
2. JOIST SIZING, GAUGE, AND SPACING WILL BE DETERMINED DURING DESIGN ENGINEERING.
3. THE FLOOR DECK WILL BE 1 ½" 25 GAUGE TYPE B GALVINIZED METAL DECK. ¾" T&G PLYWOOD OR OSB CAN BE SUBSTITUTED FOR THE METAL DECK.
4. LIGHT GAUGE STEEL STRAP BRIDGING WILL BE ATTACHED TO THE BOTTOM OF JOISTS AT MID-SPAN OR 8 FEET O.C., DEPENDING ON THE JOIST SPANS.

5. METAL DECK TERMINATION AT INTERIOR BEARING WALLS WILL BE HANDLED WITH A 1 ½" X 1 ½" 20 GAUGE METAL ANGLE. THE ANGLE WILL BE HELD BACK ½" FROM THE INTERIOR BEARING WALL TO PROVIDE DIRECT BEARING OF THE WALL TO THE "C" STUD FLOOR PANEL.
6. "C"-STUD FLOOR PANELS ARE DESIGNED AND STAMPED BY A STRUCTURAL ENGINEER.

F. ROOF SYSTEM TYPICAL SPECIFICATIONS 05400:

1. LIGHT GAUGE STEEL ROOF TRUSSES WILL BE DESIGNED @ 48" O.C. (STANDARD)WITH A TOTAL LOAD OF 50# AND A 80MPH WIND LOAD.
2. CONSTRUCTION AND PERMANENT TRUSS BRACING WILL BE DESIGNED TO ENSURE PROPER BRACING OF THE TRUSS SYSTEM.
3. TRUSS TO TRUSS AND TRUSS TO BEARING CONNECTIONS WILL BE DESIGNED.
4. ROOF DECK SHEAR TRANSFER FRAMING AND CONNECTIONS WILL BE PROVIDED FOR PROJECTS REQUIRING SUCH DESIGNS.
5. ALL BRACING, BEARING CLIPS, TRUSS TO TRUSS CONNECTIONS, AND EAVE, RIDGE, HIP & VALLEY SUPPORTS WILL BE PROVIDED IN OUR ROOF TRUSS COMPONENT PACKAGE.
6. WHEN SOFFIT RETURNS ARE REQUIRED THE RETURNS WILL BE A COMPONENT OF THE ROOF TRUSS.
7. TYPE B METAL DECK WILL BE ATTCHED TO THE ROOF TRUSSES WITH SELF TAPPING SCREWS
8. WHEN THE ROOF IS TO RECEIVE SHINGLES, ONE LAYER OF 5/8" CDX PLYWOOD (UNTREATED) WILL BE ATTACHED TO THE METAL DECK. VENTILATION FOR THE SHINGLES IS THE RESPONSIBILITY OF THE BUILDING DESIGNER.
9. ROOF STRUCTURE MADE OF LIGHT GAUGE STEEL TRUSSES AND "C" STUD INFILL (IF ANY) WILL BE DESIGNED AND STAMPED BY A REGISTERED STRUCTURAL ENGINEER FOR THE STATE OUR DESIGN BUILD SERVICE IS PROVIDED.

SUMMARY:

SUPERIOR TRUSS IS COMMITTED TO PROVIDING A DESIGN / BUILD PROGRAM WHICH WILL NOT COMPROMISE THE INTEGRITY OF YOUR PROJECT DESIGN PROCESS. WE FEEL THE ONLY WAY THIS CAN BE ACCOMPLISHED IS TO COLLABORATE OUR EFFORTS IN ACHIEVING THE ULTIMATE GOAL OF A SATISFIED OWNER WHO' S PROJECT IS TO BE COMPLETED ON TIME AND WITHIN BUDGET. TO MAKE THIS HAPPEN, SUPERIOR TRUSS & PANEL DESIGN YOUR BUILDING STRUCTURE USING LIGHT GAUGE STEEL COMPONENTS. ALL FABRICATION AND INSTALLATION OF THE COMPONENTS IN OUR DESIGN/BUILD SYSTEM IS DONE BY UNION PERSONNEL.

NO OTHER LIGHT GAUGE STEEL COMPONENT PROVIDER IS CAPABLE OF PROVIDING SUPERIOR TRUSS & PANEL DESIGN / BUILD SYSTEM.

SUPERIOR TRUSS & PANEL WILL DESIGN, ENGINEER, STAMP, FABRICATE AND INSTALL THE ENTIRE LIGHT GAUGE STEEL FRAME OF THE BUILDING. INCLUDED IN OUR **DESIGN / BUILD SYSTEM** IS THE EXTERIOR & INTERIOR LOAD BEARING WALLS, INTERIOR NON-LOAD BEARING WALLS, FLOOR SYSTEM AND ROOF SYSTEM.

ONE SOURCE FOR THE DESIGN, ENGINEERING, MANUFACTURING, AND INSTALLATION OF THE LIGHT GAUGE STEEL COMPONENTS

**FOR ASSISTANCE CONTACT PAUL STOTKO
DESIGN/BUILD MANAGER
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