NOTES:
1. Balconies require special detailing and consideration for protection against moisture and thermal bridging.
2. Where axia load bearing members do not align vertically, provide detail.

BALCONY WITH STEP DOWN
Rafter Bridging

Clip Angle, 1/2" less than Rafter Depth

Sheathing

Screws As Req’d

(2) Tracks W/1 Stud

Full Height Studs From Floor to Roof

NOTES:
1. Provide Joist & Rafter Bridging between rafters at wall.

BALOON FRAMED GABLE
ROOF END DETAIL
SECTION AT BALOON FRAMED RAKE WALL WITH WOOD OUTRIGGERS
Expansion or Anchor Bolt as Req’d Adjacent to Stud

Where Ledge is provided for the Support of a Veneer. The ledge shall be located at least one (1) course or 1 1/2" below the slab elevation.

BASE WALL AT SLAB ON GRADE
Cont. 350T20 Track Notched Over Chord W/2--#10 Screws Ea. (TYP)

See Truss Profile for Heel Dimension

See Bottom Chord Connection

Truss May Be Continuous Over Wall

Cont. Top Track


Center Line Diag. Bracing.

E.N.

Roof Sheathing

BLOCKED TRUSS HEEL SECTION
CONNECTOR PLATE

MATERIAL 16 Ga.

* X * DIM 3" Min.
* Y * DIM 3" Min.
* Z * DIM 1 1/4" Less than B.C. Height

Connect to TRUSS W/#10--14 TEK Screws or better.

BOTTOM CHORD TO TOP PLATE CONNECTION DETAIL
Simpson H1 Anchor (Truss Connection)

3-#10 Screws to Top Track

Provide Stud Under Each Truss (TTP)

2-#10 Screws to Stud

#10 Screws to Heel -- Schedule Screws per End Do Not Include Connector Screws

Connector Screws 2--#10 Each side to Chord Member

BOTTOM CHORD TO TOP PLATE CONNECTION DETAIL
Simpson FHA Strap or 18 ga. strap w/3 #8 screws min. each end (Typ. both sides)

PC. 350WCS or 6WCS same gauge as track w/3 #8 screws min. each side each flange (Typ)

BOTTOM TRACK
SPICE DETAIL
CANTILEVERED FLOOR JOIST AT BRICK VENEER

NOTES:
1. Provide continous bridging between each joist at lower wall.
2. Solid blocking in every other space may be used in lieu of bridging.
3. Where axial load bearing members do not align vertically provide detail.
2 Screws @ each stud to joist below (Farside)

ATTACH TRACK TO JOIST W/SCREWS @ EACH FLANGE

JOIST--ALIGN W/STUD BELOW

NOTES:
1. Provide cant. bridging between each joist at lower wall.
2. Solid blocking in every other space may be used in lieu of bridging.
3. Where axial load bearing members do not align vertically provide detail.

CANTILEVERED FLOOR JOIST AT FLUSH BALCONY FLOOR
Floor joist align with wall stud below

Stud—Align with floor joist below

2 Screws (Farside @ each stud to joist below

Track

Floor joist align with wall stud below

NOTES:
1. Balconies require special detailing and consideration for protection against moisture and thermal bridging.
2. Where axial load bearing members do not align vertically, provide detail

CANTILEVERED FLOOR AT STEP DOWN
BALCONY FLOOR
CANTILEVERED FLOOR AT WOOD BALCONY

NOTES:
1. Balconies require special detailing and consideration for protection against moisture and thermal bridging.
2. Where axial load bearing members do not align vertically, provide detail.
CANTILEVERED GABLE END AT CATHEDRAL

NOTES:
1. Provide bridging at ceiling joists and roof rafters.
2. Provide continuous bridging between rafters at walls.

Clip Angle (Screw as req’d by design)

Plywood or DSB Clip Angle, 1/2” less than Rafter Depth

Rafter or Top Chord

(2) Tracks w/(1) Stud

Screws as Req’d

Full Height Studs From Floor To Roof
1. Provide bridging at ceiling joists and roof rafters.
2. Provide continuous bridging between rafters at wall.

CANTILEVERED ROOF GABLE END
COLLAR TIE AT RAFTER DETAIL

- Rafter
- Collar Tie
- Continuous Channel Bridging as Req'd
- Screws By Design
2 1/2" TC Connector Same Gage as Truss Chord
W/4--#10 Screws to Girder Truss Web & 4--#10 Screws to connecting Truss Heel (TYP. UNO)

Where Girder Truss Depth will not allow TC Connector Provide Clip (Same Ga. as Truss Chord) W/2--#10 Screws ea. Leg ea. side here.

SECT. AT TRUSS

COMMON TRUSS CONNECTION TO GIRDER TRUSS
COMPOSITE TRUSS DETAIL
(SCISSORS/COMMON)

Vertical Strut Member

Bottom Chord

Web Member

NOTE:
FOR TRUSS MEMBER CROSS SECTION

#10 Screws
NOTE: Joist may be screwed directly to beam using min. 2-#4 or #5 point self-drilling screws in lieu of a clip angle.

Web stiffener as req'd (This side or fit between joist flange)

Clip Angle--May be omitted when joist Flg. is screwed directly to Beam w/#5 point self-drilling fasteners.

Steel Beam or Build-up cold-formed member

Power Driven Fastener or #5 point self-drilling screw

NOTES:
1. Continuous bridging required between each joist above beam--use solid blocking in every other space may be used in lieu of bridging.
2. When wall above, studs must align with joists.
3. Web stiffeners are not required when continuous solid blocking is used.

CONTINUOUS FLOOR JOIST OVER STEEL OR BUILD-UP BEAM
Angle clip--May be omitted when joist FLG. is screwed directly to top track

Track

Wall Stud

Web stiffener as req'd (this side or fit between joist flanges)

NOTES:
1. Solid blocking may be required between each joist.
2. Web stiffeners are not required when continuous solid blocking is used.

CONTINUOUS FLOOR JOIST OVER LOAD BEARING STUD WALL
X-Bridging

Screws as Req’d

STUDS

Screws as req’d

JOISTS OR RAFTERS

CROSS BRIDGING
Header-- See plan for size

Provide total no. of scheduled diag. strap screws into head

Diagonal Shear Wall Strap
See schedule on plan for size.

Cont. Top Track

For Header conn. See Det.

Double Stud

DIAGONAL STRAP ATTACHMENT TO HEADER
DORMER RIDGE AT MAIN ROOF DETAIL

Clips Angle (2) @ Each End (4) Total

Roof Rafters or Roof Trusses

Joist & Track

Cap Rafter W/Track

Clips as Req'd. (1) @ each side

Joist & Track Dormer Ridge Member
NOTE: DOOR JAMB STUD'S MAY BE TURNED FLANGE TO FLANGE
THUS ELIMINATING TRACK SCREWED TO FACE OF JAMB

Door Jamb

Web Stiffener as req'd (screw as req'd by design)

Screws as req'd @ each jamb stud

Solid blocking between joists at jamb

Section of stud as req'd to stiffen

Track

Plywood or OSB

Exterior Sheathing

Joist Track

Joist

DOOR JAMB BASE AT FRAMING
NOTE: DOOR JAMB STUDS MAY BE TURNED FLANGE TO FLANGE THUS ELIMINATING TRACK SCREWED TO FACE OF JAMB

Door Jamb

Expansion Bolts or Anchor bolts as req'd @ each jamb stud

Where ledge is provided for the support of a veneer. The ledge shall be located at least one course or 1 1/2" below the slab.

SLAB ON GRADE

DOOR JAMB BASE AT SLAB ON GRADE
Opening head detail--single track with header

DOOR OPENING LESS THAN 4 FEET WIDE---LOAD BEARING
DOOR OPENING GREATER THAN 4 FEET WIDE--NON-LOAD BEARING
DOOR OPENING GREATER THAN 4 FEET WIDE--LOAD BEARING
DOOR OPENING LESS THAN 4 FEET WIDE--NON-LOAD BEARING
Supported member may be connected by cutting flanges-- bending web to desired angle & fastening directly with screws as desired.

DOMER RAFTER AT ROOF RAFTER DETAIL
Simpson Coil Strap C5150
W/#10 Screws (Cont. at
BLK'G & shear wall)

---

10W CS18 Blocking

---

Joist Beyond

---

Rim Joist

---

Double Stud

---

Floor Joist

---

12 gage CLIP
W/4--#10 Screws
each leg (Typ)

---

Connect to Rim Joist
Web W/4--#10 screws.

---

DRAG STRUT BLOCKING INTO FLOOR DIAPHRAGM
DRAG TRUSS TO SHEAR WALL TOP TRACK

- Truss Bottom Chord
- Top Track
- Alternate Attachment #10 screws @ 4" O.C.

DETAIL A

L2x2x20 Gage W #10 @ 4" O.C. each leg

18 Gage Bent Plate Cont. W/#10 @ 4" O.C. to Top Track & Bottom Chord

8" Max

DETAIL B

Shear Wall
TYPICAL EXTERIOR CORNER FRAMING

Holdown
See Plan for type

#8 or #10 self drilling screw (Typ)

Provide DBL. stud here where holdown occurs

DBL. Stud

EXTerior CORNER FRAMING WITH HOLDOWN
EXTERIOR POP-OUT DETAIL

- Rough Opening
  - See Plan
- Track
- #8 or #10 Screws
- Varies
- Stud (See Plan Req'd Size)

Samples from www.AutoCADDetails.net
EXTERIOR WALL SECTION WITH PARALLEL FLOOR JOISTS

Cont. Track

Rim Joist--Use Track same size & gage as joist (Typ)

E.N.

Plywood Sub-Floor

BLK’G Same size & Ga. as joist (Typ @ 24" O.C.)

Joist
1. Provide continuous bridging between each joist at lower wall.
2. Solid blocking in every other space may be used in lieu of bridging.
3. Where axial load bearing members do not align vertically provide detail.

FLOOR CANTILEVER
FLOOR FRAMING AT EXTERIOR WALL

- Stud
- Sill Track
- Screws or bolts as Req'd.
- Web Stiffener as Req'd.
- Rim Track
- Top Track
- Stud Under Ea. Joist (TYP)
- Sheathing (OSB or Plywood)
- Joist
Clip Angle, 1/2" less than joist depth: Attach to concrete w/expansion or anchor bolts.

FLOOR JOIST @ FOUNDATION WALL POCKET
FLOOR JOIST CONNECTION TO INTERIOR STEM WALL

Sill Track Anch. (#12 x 1 1/2" Screws @ 12" O.C. Stagg.)

Stud Wall

Cont. Track

(2) 16 ga Conbt. Track (Back to Back)

E.N.

16ga Bent Plate X 3" long W/6-#10 to track (TYP. @ ea. anch. Blt.)

5/8" X 10" A.B. @ 4' O.C. & within 12" of ends & corners (TYP. except as otherwise shown or noted)

Floor JST Beyond

CMU Stem Wall

Samples from www.AutoCADDetails.net
Clip angle, 1/2" less than joist depth: attach clip to concrete w/expansion or anchor bolts.

FLOOR JOIST FLUSH WITH TOP OF FOUNDATION
NOTE: Provide solid blocking & bridging as Req'd.

FLOOR JOIST FLUSH WITH TOP OF FOUNDATION
Steel Beam

Power driven fasteners or self-drilling #5 screws as req'd.

Cont. track w/2-#10 to closure track @ each joist

Cont closure track same depth as beam (TYP. each side)

FLOOR JOIST FRAMED FLUSH TO STEEL OR BUILD-UP BEAM
1-#10 T&B ea. joist (TYP)

Power driven fasteners or self-drilling #5 screws as req'd.

Steel Beam

Cont. track w/2-#10 to closure track @ ea. joist

Cont. closure track same depth as beam (TYP. ea. side)

FLOOR JOIST FRAMED FLUSH TO STEEL OR BUILD-UP BEAM

Samples from www.AutoCADDetails.net
**Stud**

**Track**

**Joist**

**Blocking at same spacing as stud (TYP. first Bay)**

**Screw joist to track as req’d**

**Sheathing (OSB or Plywood)**

**Wall stud**

**FOOR JOIST PARALLEL TO EXTERIOR WALL BEARING ON FOUNDATION**
Wall Stud

FLOOR JOIST PARALLEL TO EXTERIOR WALL BEARING ON FOUNDATION (ALTERNATE)

Rim joist may be doubled as shown and may be utilized to eliminate the need for additional door or window headers. This detail may also be used where fire rated wall construction is req’d.
FLOOR JOIST SPLICE OVER INTERIOR LOAD BEARING STUD WALK

- Stud
- Sill Track
- Sheathing (OSB or Plywood)
- Solid Block
- Top Track
- Stud centered on joist (TYP)
- Fasteners as Req'd each joist
Solid Blocking

Steel Beam or Build-up cold-formed member

Sill Track

Sheathing (OSB or Plywood)

Stud

Joist

Power driven fasteners or selfdrilling #5 screws as Req'd.

FLOOR JOIST SPLICE OVER STEEL OR BUILD-UP BEAM
Screws or bolts as req'd.

Web stiffeners as req'd.

Rim Track

Top Track

Stud Under each joist (TYP)

Sill Track

Sheathing (OSB or Plywood)

FLOOR JOIST TO EXTERNAL WALL-LOAD BEARING
Plywood Sub-floor

Stud Wall (May not occur here--See Plan)

Cont. Track same Ga. as joist W/ #10 screws @ 12" O.C. to BM. staggered

Beam (See Sched)

Floor Joist--See Plan for size.

FLOOR JOIST TO FLUSH FRAMED BEAM CONNECTION
Stud- Align with Floor joist Below

2 Screws @ each stud to joist below (Farside)

Attach track to joist w/screws @ each flange

Clip angle @ 48" o.c.--screw to joist as req'd.

Exterior Sheathing

Expansion Bolt or anchor bolt

Provide sill sealer/caulking (beneath track)

Joist Track

Sheathing or Plywood

Uniform Bearing as req. @ end of joist

FLOOR JOIST TO TRACK BEARING ON FOUNDATION
FLOOR JOIST AT SUNKEN FLOOR

- Joist Track
- Joist Web Stiffeners
- Screws length & body dia. as req'd by design
- Clip Angles @ 48" o.c.

Length on screw depends on thickness of OSB or plywood. #8 or #10 screw as req'd by design.

OSB or Plywood

Power driven fasteners or #4 or #5 point self drilling screws

JOIST
FLOOR JOISTS BEARING ON FOUNDATION
Stud ~ Track ~

2 Screws @ each stud

Joist Sheathing (OSB or Plywood)

--- Blocking at same spacing as studs (TYP First Bay)

Sheathing (OSB or Plywood)

FLOOR JOIST PARALLEL TO EXTERIOR WALL

Screw Joist to Track as Req'd

Wall Stud
FLOOR JOISTS PARALLEL TO EXTERIOR WALL (ALTERNATE)

Screw Joist to Track as Req’d (From under Track)

SEE NOTE: Below

NOTE:
Rim joist may be as shown and may be utilized to eliminate the need for additional door or window headers. This detail may also be used where fire rated wall construction is required.
FLOOR JOIST SUPPORT AT CONTINUOUS WALL

Joist Track

Concrete Fasteners as Req'd.
Sheathing

Elevation Varies

Ceiling Joists or I bottom chord

NOTE: Provide Bridging as necessary.

Rafters or top Chord

Screws as Req'd

Studs maybe framed full height to underside of SHTG.

Ceiling Joists or bottom chord

NOTE: Provide Bridging as necessary.

Full Height Studs From Floor to Roof

GABLE ROOF END DETAIL

Samples from www.AutoCADDetails.net
Sheathing
Elevation Varies
Ceiling Joists or I bottom chord

NOTE: Provide Bridging as necessary.

Rafters or top Chord

Screws as Req'd

Studs maybe framed full height to underside of SHTG.

Ceiling Joists or bottom chord

NOTE: Provide Bridging as necessary.

Full Height Studs From Floor to Roof

GABLE ROOF END DETAIL
Clip Angle, 1/2"
less than Rafter Depth

Sheathing

Elevation Varies

Screws As Req'd

(2) Tracks
W/1 Stud

Ceiling Joists or
Bottom Chord

Diagonal Brace at Ridge to
Transfer Loads into ceiling
diaphragm

Screws as Req'd

Wall Studs

GABLE ROOF END DETAIL
TOP & BOTTOM CHORD

TRUSS WEB

GUS TRUSS MEMBER SECTION
GUSS TRUSS TO TOP TRACK DETAIL

- Continuous TOP Track
- SIMPSON H1 SEISMIC TIE
- #10 Flat Head TEK Screw (4) Total To TOP Track & Stud
- #10 TEK Screw (2) Each Side To Truss & Heel (TYP)
- Stud
Clip Angle or section of track

Support Beam

Gusset Plate @ each side

Support Member

Header Beam

Beam may also be toe to toe members

Web stiffeners as req'd

Multiple members for bearing support

Cope flange to allow expansion of web for correction to support member (ea side)

Support Member

Header Beam

HEADER TO JAMB STUD DETAILS
Steel Beam or Floor joist

Heel cut Stl. Beam to match truss top chord slope

EQ

1'-0" Min.

EQ

1'-0" Min.

12

Insert (2) 6" x 18ga Cee studs inside beam or (1) 6"x16 ga on back of joist and screw w/6-#10 centered (TYP)

HEEL CUT FLOOR JOIST
### Holdown Details

**HOLDOWN**

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* NOTE: Bolt embedment based on min. conc. strength of 2500 P.S.I.

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**CMU Stem Wall**

**Holdown See Plan for size (Typ)**

**See Schedule for size & No. of fasteners** (Typ)

**Anchor Bolt**

**Rim Joist** (Track)

**Double Stud—See Plan**

**Bottom Track** (Track)

**Double Nut w/washer** (Typ)

**Dim. "A"**

**HOLDOWN DETAIL AT STEM WALL**
TYPICAL INTERIOR CORNER FRAMING

NOTE:
Use #8 or #10 Self Drilling Screws in all cases

TYPICAL INTERIOR INTERSECTION

ALTERNATE INTERIOR INTERSECTION FRAMING

NOTE:
Use #8 or #10 Self Drilling Screws in all cases
Provide total No. of scheduled Diag. Strap screws into Rim Joist

Diagonal Shear Wall Strap—See Schedule on plan for size.

INVERTED CHEVRON TYPE STRAP CONNECTION TO RIM JOIST
JACK TRUSS CONNECTION TO GIRDER TRUSS

4-#10 Screws to Girder Truss Web Member (TYP) UNO

25TC20 Connector X 4” Long W/4-#10 Screws to Heel Member (TYP. 2 Places)

Provide 18 Ga. Bent Pl in Lieu of 25Tc20 Connector

SECT AT PERP. TRUSS

SECT AT SKEWED TRUSS

Girder Truss Web Member

Heel

Hip or Jack Truss

Edge of Top & Bottom Chord

Samples from www.AutoCADDetails.net
2 Screws @ each side of jamb

Track Web Stiffeners @ each side of double joist below jambs (screws as req'd by design)

NOTE:

Web stiffeners may not be needed depending upon the particular design requirements.

JAMB AT BOTTOM OF WALL
2 Screws @ each Jam stud

Track web stiffeners @ each side of double joist Below Jambs (Screw as Req'd by design)

Plywood or OSB

NOTE: Web stiffeners may not be needed depending upon the particular design requirements.

JAMB AT FLOOR JOISTS
Top Track or Distribution member

Screws as req'd

Multiple members as req'd at jamb

JAMB AT TOP OF WALL

Samples from www.AutoCADDetails.net
Solid blocking or X-bridging. Fit between first & last (2) spaces repeat as req'd

Anchor bridging to solid blocking

Flat Strap, notched channel X-bridging or proprietary bridging, attach to each joist.

Transfer bridging forces into lateral stability system

Joist or rafters

anchor bridging to solid blocking

JOIST AND RAFTER BRIDGING
JOIST CONNECTION AT STEM WALL

- **3-#10 Screws To Rim** & 6-#10 To Joist (Typ)
- **Floor Joist** See plan for size & spacing (Typ)
- **Web Stiffeners** same size as Stud
- **Cont. 16 Ga. Rim Joist** (Track)
- **20 Gauge Web stiffener connector @ each joist**
- **Stud Wall**
- **Sill Track**
- **Foundation Stem Wall**

Samples from www.AutoCADDetails.net
Clip angle. 1/2" less than joist depth (screw as req'd)

Additional Members as Req'd.

JOIST HEADER TO BUILD-UP JOIST
JOIST HEADER TO FLOOR JOIST
JOISTS SUPPORTED AT BEARING STUDS

Provide Full bearing (full width of stud min.)

Screw directly to top track (Min. 2-#'10 ea. joists)

NOTES:
1. Continuous bridging req'd between each joist above wall. Solid blocking in every other space may be used in lieu of bridging.
2. When wall above, studs must align with joists.
3. Where axial load bearing members do not align vertically, provide detail.
STUDS

Top edge of penetration shall nor be located any higher than the top edge of the punch-out.

Reinforcement required for penetrations greater than punch-out depth

No reinforcement required for penetrations with a diameter less than or equal to punch-out depth, except as noted.

NOTES:

1. Flanges shall not be notched or cut.
2. Capacity verification by design is req'd.
   for any openings located at concentrated loads and bearing ends.

JOIST, STUD OR RAFTER WED PENETRATIONS
NOTE: Gusset plate may not be required if calculated number of screws can be directly applied to all joined webs through chord member.

Provide gusset plate to match heavier member connected where SPE (Screws per end) is followed by letter G (TYP)

Screws may be placed in two rows as shown (TYP)
When all scheduled screws can be provided in lap—No gusset plate is required.

NOTE: Gusset plate may not be required if calculated number of screws can be directly applied to all joined webs through chord member.

KING POST W/GUSSET DTL
MECHANICAL UNIT SUPPORT BETWEEN TRUSSES IN ATTIC SPACE.

Provide 2–2” X 16 gage Strap Brace to FAU. Frame Approx. here (Typ)

Provide 2” X 2” X 18 gage 15” LG. Clip angle W/2 #10 to each platform member (Min.)– Typ.
Where frame cannot be directly attached.

Support for FAU May be over 3 Trusses.
(See Mech. Plans.)

NOTE:

(4) 350WCS18 (Platform) @ approx. 12” O.C.
(Center on unit)
#8 or #10 Screws @ 16" O.C. to joist or blocking

3 1/2" Studs @ 8" O.C.

6" Track

Piece of joist as solid blocking @ each joist spacing

Stud Wall

Plywood or OSB

NON-BEARING SOUND PARTITION DETAILS
OPENING HEAD DETAIL
--LOAD BEARING JAMB AND HEAD
OPENING HEAD DETAIL--SINGLE TRACK WITH HEADER

- Header Beam as Req'd by design
- Cripple Stud
- Head Track
- Top Track
- Connect header to Jamb Studs as required
- Cut Web and bend as necessary
- Multiple Members as req'd at jamb

Samples from www.AutoCADDetails.net
Clip Angle, 1/2" less than Joist Depth

Clip Angle, 1/2" less than Joist Depth

OPENING IN FLOOR JOISTS
Bend Portion of web down and fasten to jamb

Cut track and bend to allow extension of flanges for connection

NOTE: Invert Details for head conditions

OPENING SILL DETAIL--SINGLE TRACK
Cont. 2" x 20 Ga. Strap--Attach to each Truss W/2-#10 Screws (TYP)

NOTE:
For Truss member cross section

Cont. 20ga. Deep Leg Track Fascia

See Arch Drawings for finish fascia condition & position

OVERHANG DETAIL---FLAT BOTTOM CHORD
Cont. 2" x 20 Ga. Strap--Attach to each Truss W/2-#10 Screws (TYP)

Top Chord

Vertical Strut Member

NOTE:
For Truss member cross sections detail

Vaulted Bottom Chord Member

Top Track (TYP)

Exterior Studs (TYP)

Bottom Chord to top plate connection

Cont. 20ga. Deep Leg Track Fascia

See Arch Drawings for finish fascia condition & position

OVERHANG DETAIL---SCISSOR TRUSS
PARALLEL FLOOR JOIST TO STEM WALL

Joist
See Plan

20 ga. Blk’g @ 24” o.c. See Pg. 667

16 ga. Cont. Rim Joist (track)

5/8” x 10” A.B. @ 4’ O.C. & within 12” of ends & corners (Typ. except as otherwise shown or noted)

18” Min.

1’-6” Min.

E.N. Plywd. to BLK

Plywood Shng.

CMU StemWall

Stud Wall Cont. Track

16 ga. bent plate X 3” long W/6-#10 to track (TYP. at ea. Anchor BLT)

E.N. / CMU / Plate StemWall / Washers

Samples from www.AutoCADDetails.net
2 Screws @ each stud to each joist below SHT’G edge screw--to interior joist

Joists

Clip Angle @ 48’ o.c.--Screw to joist as req.

Exterior Sheathing

Sill sealer/caulking beneath Track

Expansion or Anchor Bolt

Sheathing (OSB or Plywood)

Foundation Stem Wall

Stud

Track

Screw each Flange

PARALLEL FLOOR JOISTS @ FOUNDATION
Stud Align with floor joist below

Screws or bolts as req'd

Sill Track

Sheathing (OSB or PLYWOOD)

Screws at each flange

Rim Track

Stud under ea. joist (TYP)

Joist—Align w/wall studs below (TYP)

Top Track

Web Stiffeners

NOTE:
In order to facilitate the attachment of drywall which must extend to the underside of floor sheathing, blocking must be provided between each joist.

PARTY WALL AT LOAD BEARING WALLS
Rafter or Top Cord

Continuous Bridging as Req'd

Align joist & Rafter over wall stud below Wall Track

Joist or bottom chord connected to rafter

Clip Angle

Distribution member where joist do not align with studs below

Wall Stud

RAFTER EAVE DETAIL
Continuous Angles
Fasten W/Screw @ each member (TYP)

Soffit Framing as Req'd

RAFTER EAVE DETAIL
RAFTER EAVE DETAIL

- Rafter or Top Chord
- Continuous Bridging as Req'd
- Joist or Bottom Chord
- For Details
- Wall Stud
- Continuous Angles
  Fasten W/Screw @ each member (TYP)

Samples from www.AutoCADDetails.net
Continuous Angle fasten w/screws at each member

Clip

Notch Rafter as Req'd

EAVE RAFTER DETAIL
Continuous Angle fasten w/screw at each member

RAFTER EAVE DETAIL
Screws as Req'd by design

Continuous Channel Bracing as Req'd

RAFTER TO DIAGONAL BRACE DETAIL
20 ga. bent plate cont. w/ #10 screws @ 6" O.C. to track notch over rafters (TYP)

8- #10 Screws to Rafters (TYP)

See Drawing for Finish Fascia Condition

Cont. 20 ga. Track

350T20

350WCS16 Connector W/3 #10 Screws to Rafter & 3 #10 to Top Track (field bend web as req"d)

Top Track

Exterior Studs (TYP)

Roof Sheathing

Rafters @ 24" O.C. (TYP)

18"

RAFTER WITH REDUCED SIZE OVERHANG
Joist & Track as Ridge Board

Clip Angles as Req'd @ each side

Align Rafters

RAFTER BOARD DETAIL
Cope Flanges of one Top Chord for Lap

Screws by Design

Continuous Channel Bridging as Req'd

RIDGE DETAIL
Continuous Angles Fasten w/screws @ each member (Typ)

Rafter or Top Chord

Soffit Framing as req'd.

Joist or Bottom Chord

Clip Angle between Members Screw as req'd by design

Sheathing

Wall Stud

ROOF EAVE AND SOFFIT
Angle as Req'd for eave BD.

Provide continuous Rafter bridging over wall or solid blocking @ every other space.

Clip Angle (screw as Req'd by design)

Wall Stud

ROOF EAVE AT CATHEDRAL CEILING
Continuous bridging as req'd

Align joist & rafter over wall stud below

Joist or Bottom chord connected to rafter

Clip Angle

Distribution Member Where joist do not align with studs below

Wall Stud

ROOF EAVE

Samples from www.AutoCADDetails.net
Plywood or O.S.B.

Screws as Req'd

Rafters or Top Chord

Full Height Studs From Floor to roof

NOTE: Provide bridging at ceiling joists and rafters.

ROOF GABLE END AT CATHEDRAL
Ceiling Joists or Bottom Chord

NOTE: Provide bridging at ceiling and rafters.

Wall Studs

Screws as Req'd

Plywood or O.S.B.

Rafters or Top Chord

Screws as req'd
Screw by design

Clip Angle

Align vertical web over wall stud below

Continuous channel bridging

ROOF
SCISSORS
TRUSS
BEARING
Angle as req'd for eave BD.

Screws by design

Continuous channel bridging as req'd.

Align vertical web over wall stud below

For Connection see rafter eave detail

NOTE:
Where axial load bearing members do not align vertically, provide detail.

ROOF TRUSS BEARING
Align Joist & Rafter over wall stud below.

Clip Angle (Screws as Req'd) by design.

Wall Stud

Wall Track

Rafter

Joist

ROOF TRUSS EAVE
Provide gusset PL to match heavier member connected.

NOTE:
FOR TRUSS MEMBER SECTION DETAIL

Provide #10 screws each chord member

3/4" (TYP)

DETAIL AT BOTTOM CHORD

SCISSORS TRUSS BOTTOM CHORD DETAIL
Where axial load bearing members do not align vertically, provide detail

NOTE:

SCISSOR TRUSS END AT EXTERIOR WALL
Gusset Plate each side to match heavier member connected.

Web Member

3/4" (TYP)

Web Member

#10 Screws (TYP)

Bottom Chord Member

Provide #10 Screws each chord member

DETAIL AT BOTTOM CHORD

NOTE: Gusset plate may not be required if calculated number of screws can be directly applied to all joined webs through chord member.

SCISSORS TRUSS WITH CLIPPED CEILING DETAIL
SECOND FLOOR SHEAR
HOLDOWN TO FLOOR JOIST

PCE. 350WCS20
STUD W/3--#10 To Joist BLK.

Extend Gusset Plate as shown & add screws to Blk'g joist or beam. (Blk'g shown). Screw size & Qty. to match schedule 1/2 (B + C)
SECOND FLOOR SHEAR WALL HOLDOWN DETAIL

Use Plate Washers Under Nuts (Typ)

Cut hole in Track & Floor sheathing (1\"-0\")

DBL. Stud

Diag. Starp & Gusset Per Det.

Bottom Track

Double Stud

Scheduled Anchor Bolt (Threaded Rod)

Simpson Type "HD" Holdown Above & Below Floor-- See Plan for size. Scheduled Stud Bolts (Typ)

Floor Joist See Plan
SECOND FLOOR SHEAR WALL STRAP TIE HOLDOWN DETAIL

Cut hole in track & floor sheathing (2"

Double stud in-fill w/4--#10 Screws to strap

Double Stud

Diag. Strip & Gusset Per Det.

Bottom Track

Floor Joist

Samples from www.AutoCADDetails.net
SECOND FLOOR SHEAR WALL STRAP TIE HOLDOWN DETAIL (ALTERNATE)

Cut hole in Track & Floor sheathing (2”-0”)

DBL. Stud

Diag. Strap & Gusset per Det.

Floor Joist

See Plan

2” X 16 Ga. Strap w/ (V) Screws each end per schedule

Bottom Track

Diag. Strap & Gusset per Det.

DBL. Stud
2"x4" Blocking Between Outriggers

162SS25 X4" W/ 2--#10 T&B into 2x & 2--#10 into Chord (TYP)

250T20 Diag. Brace @ each Outrigger (TYP)

Top Track

#10 Screws @ 12" O.C. to TOP TRACK

WEB InFill @ 24" O.C. (TYP)

End (Or Rake) Wall TRUSS

Ext. STUD

Ext. Finish

SECTION AT RAKE WALL TRUSS WITH WOOD OUTRIGGERS
2–#10 Screws To Top Chord (TYP)

20 Gage Track Between Outriggers W/#10 Screws At 12" O.C. to Top Chord

Cope As Req’d

Top Chord Adjacent Truss

2" x 2" Clip Angle W/ 2–#10 each Leg (TYP)

Eave Soffit

Cont. 20 Ga. DEEP Leg Track Fascia

Web Infill @ 24" O.C.

250T20 Diag. Brace @ each Outrigger (TYP)

End (Or Rake) Wall Truss

Exterior Stud

Exterior Finish

SECTION AT RAKE WALL TRUSS
1---#8 or #10 Self Drilling Screw to each stud

Gusset Plate W/#10 Screws to stud & #10 screws to track (as req'd by design)

Diagonal Strap w/#10 screws to plate (as req'd by design)

Track NOTE: GUSSET PLATE OCCURS AT BOTH ENDS OF STRAP (UNLESS DETAILED OTHERWISE)

Double Stud

H

W
#10 Self Drilling Screws To Double Stud
See Simpson catalog for No. required.

Double Stud
Continuous Sill Track
Gusset Plate
Shear Strap
#10 Self Drilling Screws (Typ)
Holdown Anchor Bolt

SHEAR WALL GUSSET PLATE & HOLDOWN ASSEMBLY
Lateral Stability strap as req'd by design

Joist------.

Screw to each Stud

Bottom Track as req'd to transfer loads

SHEAR WALL HOLDOWN AT SECOND FLOOR

Multiple members as req'd at ends

Gusset Plate as req'd by design

Holdown may be located on opposite side of DBL. stud.

Holdown & Anchor bolt as req'd

Sheathing

Blocking

Top Track as req'd to transfer loads

Additional stiffener adjacent bolt to allow pretensioning of bolt

Samples from www.AutoCADDetails.net
Lateral stability strap as req'd by design

Multiple member as req'd at ends

Screw track to each stud

NOTE:
Strap forces may require additional stiffening of the bottom track.

Holdown may be located on opposite side of DBL. stud.

Bottom Track as req'd to transfer loads

Gusset Plate as Req'd

Screws as Req'd

NOTE:
Strap forces may require additional stiffening of the bottom track.

SHEAR WALL HOLDOWN AT BASE
HD Anchor where occurs

Studs @ 24" O.C.

Doubl Jamb Stud (Min.)

WCS16 TrackBlock X 1'-10" W/anchor bolts, per anchor bolt schedule (2 shown) see plan

Double Holdown where occurs

WCS16 (Same Depth as wall stud BLK'G)

PLAN A

PLAN B

(Same as plan A except as shown)

SHEAR WALL TRACK REINFORCEMENT AND ANCHORAGE
NOTE:
1. Where blocking material thickness allows, notch and bend track 90 deg. for connection.

2. Where provisions are provided for transfer of flange forces to solid blocking. Blocking need not be the full depth of the member.
At interior walls where floor is continuous through conn.

Bottom Track

Top Track

Stacked Second Floor Shear Wall with Common Gusset Plate

Provide scheduled Top & Bottom Gusset plate in one piece

Strap occurs only where shear wall is present

Samples from www.AutoCADDetails.net
STEM WALL DETAIL

Sill Track Anch. (12" x 1 1/2" Screws @ 12" O.C.)

Plywood Shdg.

Floor Joist Beyond

CMU Stem Wall

Stud Wall Cont. Track

16 ga. Cont Rim Joist (Track)

5/8" X 10" A.B. @ 4' 0.C. & within 12" of ends & corners (Typ. except as otherwise shown or noted)

Plate Washer

16 ga. Bent Plate x 3" ong W/6-#10 to track (Typ. at ea. Anc. BLT)

E.N. (Edge Screw Plywood to track)

Track

3"

STEM WALL DETAIL

Floor Joist Beyond

CMU Stem Wall

Stud Wall Cont. Track

16 ga. Cont Rim Joist (Track)

5/8" X 10" A.B. @ 4' 0.C. & within 12" of ends & corners (Typ. except as otherwise shown or noted)

Plate Washer

16 ga. Bent Plate x 3" ong W/6-#10 to track (Typ. at ea. Anc. BLT)

E.N. (Edge Screw Plywood to track)

Track

3"
NOTE: Gusset plate may not be req'd if calculated number of screws can be directly applied to all joined webs through chord members

STEP DOWN TOP CHORD DETAIL
15TW20 Web Stiffener W/2-#10 Screw each (TYP)

Truss Top Chord

Stiffener (TYP)

2-#10 Screws each side

Top Track

Stud

4-#10 Screws each Truss Chord to Top Track (TYP. Conn.)

25TC20 Solid Blocking W/4-#10 each BLK To Trac

2 1/2"

E.N.

TOP CHORD BEARING FLOOR TRUSS DETAIL

Cont. Top Track

Truss Bottom Chord

Cont. 2" x 2" 20 gage Angle W/2-#10 screws each Truss each Leg (TYP)
TOP CHORD BEARING FLOOR TRUSS DETAIL
(ALTERNATE)
TOP OF NON-LOAD BEARING WALL TO PARALLEL FLOOR JOIST

Sheathing

Screws as Req'd

Cope Flange of cross stud

Joists

Section of stud for cross member as req'd to brace wall screw as req'd

Non-load Bearing Wall
Double joist section as req'd by design when studs do not align with joists below. At exterior walls, continuous joist track may be substituted for one joist section.

Distribution member as req'd by design where joists and/or studs do not align with studs below may eliminate the need for the distribution member.

TOP TRACK LOAD DISTRIBUTION DETAILS
#10 screws--Number req'd by design each side splice (Typ)

Insert same size as stud to match track gauge

Samples from www.AutoCADDetails.net
2 Screws @ each Stud (Track to Track)

NOTE:
Joint Must be Braced Diagonally or Horizontally to the Nearest Roof or Floor Framing Member.

TRACK TO TRACK DETAIL
Roof Sheathing W/#10 Screws at 6" O.C. to BLK'G (TYP. UNO)

350T20 X Length of Shear Wall--Notched Over Truss Top Chord W/ 2--#10 Ea.

Truss

Truss Heel or Web Member

Bend Flange as Req'd

2--#10 Screws Each Side Track

Bend Web & Screw To Top Track W/2--#10

Shear Wall Strap

TRUSS BLOCKING DETAIL

Diag. 20 Ga. Track (TYP At Alternate Bays)

Top Track

Samples from www.AutoCADDetails.net
NOTE:
Vertical Heel Member may be screwed directly to stud without the use of a connector.
Cont. 2 x 2 x 20 Ga. Bent PL-
Attach to Top Chord W/2 #
10 Screws (TYP)

#10, @
6" E.N.

See Truss Profile for
Heel Dimension

Cont. 20 ga.
Fascia
Track

Cont. Fascia

Header- SEE
Beam Schedule
for size

Roof
Sheathing

Top Chord
Member

Bottom Chord
Member

Vertical Strut
Member

Truss
Connection

TRUSS CONNECTION TO HEADER---RAKED
FASCIA
Cont. 2 x 2 x 20 Ga. Bent PL-Attach to Top Chord W/2 #10 Screws (TYP)

#10, @ 6" E.N.

See Truss Profile for Heel Dimension

Cont. Fascia

Header- SEE Beam Schedule for size

TRUSS CONNECTION TO HEADER---ZERO OVERHANG
Rafter
Align joist & Rafter over wall stud below
Wall Track
Joist
Clip Angle (Screw as req'd by design)
Wall Stud

TRUSS EAVE DETAIL
Screws By Design

Angle as Req'd for Eave BD.

See Rafter Eave Dtl

NOTE: Where axial load bearing members do not align vertically. See top track load distribution dtl.

Continuous Channel Bridging as req'd

TRUSS END @ EXTERIOR WALL

Align vertical Web over Wall stud below
Provide gusset PL to match heavier member connected where SPE (Screws per End) is followed by the letter G (TYP)

**DETAIL AT TOP CHORD**

NOTE: Gusset plate may not be required if calculated number of screws can be directly applied to all joined webs through chord member.

**DETAIL AT BOTTOM CHORD**

TRUSS WEB CONNECTION DETAIL
Fasteners

12- #10 Screws

Typical CS Installation
Floor to Floor Tie (CS16)

(Light Gage Steel Construction)
<table>
<thead>
<tr>
<th>FASTENERS</th>
<th>Min. Footing</th>
<th>SCREWS</th>
</tr>
</thead>
<tbody>
<tr>
<td>S/PAHD42 6&quot;</td>
<td>7 - #10</td>
<td></td>
</tr>
<tr>
<td>S/PAHD42 8&quot;</td>
<td>7 - #10</td>
<td></td>
</tr>
<tr>
<td>S/MPAHD 6&quot;</td>
<td>9 - #10</td>
<td></td>
</tr>
<tr>
<td>S/MPAHD 8&quot;</td>
<td>12 - #10</td>
<td></td>
</tr>
<tr>
<td>S/HPAHD22 6&quot;</td>
<td>10 - #10</td>
<td></td>
</tr>
<tr>
<td>S/HPAHD22 8&quot;</td>
<td>12 - #10</td>
<td></td>
</tr>
<tr>
<td>HPAHD22-2P 6&quot;</td>
<td>10 - #10</td>
<td></td>
</tr>
<tr>
<td>HPAHD22-2P 8&quot;</td>
<td>14 - #10</td>
<td></td>
</tr>
</tbody>
</table>

4" Slab
8" from Corner

Typical HPAHD22 Double Pour Edge Installation--(Light gage Steel Construction)
Fasteners

6-#10 Screws

Typical L50 Installation
Reinforcing & Skewable Angles (Light Gage Steel Construction)
12-#10 Screws

Typical LTS Installation Truss to Steel Studs
(Light Gage Steel Construction)
Alternate MAS Installation
(Light Gage Steel Construction)
Fasteners

A21-------4-#10 Screws
S/A23---4-#10 Screws

Typical S/A 23 Installation (Light Gage Steel Construction)
Fasteners

To Rafters: 3-#10 Screws
To Plates: 3-#10 "
To Studs: 1-#10 "

Typical S/H1 Installation
(Light Gage Steel Construction)
Fasteners

S/H2.5
To Rafters------4-#10 Screws
To Studs--------4-#10 Screws

Typical S/H2.5 Installation
(Light Gage Steel Construction)
Fasteners
To Rafters------2-#10 Screws
To Plates-------2-#10 Screws

Typical S/H3 Installation

(Light Gage Steel Construction)
Typical S/HD8 Installation (Light Gage Steel Construction)
Min Footing Width Screws

One #4 Rebar in shear cone (min rebar length is 1e+6")

Typical S/HPAHD Single Pour Corner Installation

(Light Gage Steel Construction)
Fasteners

<table>
<thead>
<tr>
<th>Min Footing Width</th>
<th>Screws</th>
</tr>
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<tbody>
<tr>
<td>S/PAHD42 6&quot;</td>
<td>4-#10</td>
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<tr>
<td>S/PAHD42 8&quot;</td>
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<td>4-#10</td>
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<td>S/MPAHD 8&quot;</td>
<td>6-#10</td>
</tr>
<tr>
<td>S/HPAHD22 6&quot;</td>
<td>5-#10</td>
</tr>
<tr>
<td>S/HPAHD22 8&quot;</td>
<td>7-#10</td>
</tr>
</tbody>
</table>

4" Slab Thickness

1/2" distance from corner

Typical S/HPAHD Double Pour Corner Installation---(Light Gage Steel Construction)
### Fasteners

<table>
<thead>
<tr>
<th>Min Footing Width</th>
<th>Screws</th>
</tr>
</thead>
<tbody>
<tr>
<td>S/PAHD42 6&quot;</td>
<td>7-#10</td>
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<tr>
<td>S/PAHD42 8&quot;</td>
<td>9-#10</td>
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<td>S/MPAHD 8&quot;</td>
<td>12-#10</td>
</tr>
<tr>
<td>S/HPAHD22 6&quot;</td>
<td>10-#10</td>
</tr>
<tr>
<td>S/HPAHD22 8&quot;</td>
<td>14-#10</td>
</tr>
</tbody>
</table>

**Typical S/HPAHD**

Single Pour Edge Installation

*(Light Gage Steel Construction)*
Fasteners

<table>
<thead>
<tr>
<th>Bolts</th>
<th>Screws</th>
</tr>
</thead>
<tbody>
<tr>
<td>S/LTT20</td>
<td>1/2&quot; 6-#10</td>
</tr>
<tr>
<td>S/HTT14</td>
<td>5/8&quot; 16-#10</td>
</tr>
</tbody>
</table>

Typical S/LTT, S/HTT Tension Ties

(Light Gage Steel Construction)
Install SSTB before the concrete pour using a MKP (hold down). Install the SSTB diagonally at approximately 45 deg. from the wall. Install one #4 rebar 3" to 5" from the top of the foundation.

Min. concrete compression strength is 2500 psi.

SSTB is suitable for monolithic and two pour installation.
NOTE:

Before concrete pour, Install diagonally at approx. 45 deg. in the cell.

Install one #4 horizontal rebar approx. 12" from the top and #4 vertical rebar min. 48" O.C.

Grout all cells with min. 2000 PSI concrete.

TYPICAL SSTB INSTALLATION FOR GROUTED CONCRETE BLOCK
Stud must fit tight against track web before being screwed.

Cont. Sill Track

Track Web

Track Flange

#8 or #10 Self Drilling Screw each side

TYPICAL STUD TO SILL TRACK CONNECTION
Typical TB Installation
(Light Gage Steet Construction)
Provide double studs under girders truss (Where occurs)

Provide plastic grommet in pre-punched hole where non-metallic electrical cable (Romex) is used (TYP)

Typical stud to sill connection, use #6 screws self tapping ea. side

Typical wall framing elevation

NOTES:
* Member sizes shown in this detail are typical except as otherwise shown on the plans or specific panel elevations.
All studs shall be spaced at 24" O.C. except as shown otherwise and as noted below.
Load bearing studs shall be spaced so as to fall directly under roof trusses/rafters or under floor joists.

SCHEDULE

<table>
<thead>
<tr>
<th>MARK</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>SIZE</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>Top Track</td>
<td>3</td>
<td>1 1/2&quot; x 20ga.</td>
</tr>
<tr>
<td>B</td>
<td>Bottom Track</td>
<td>3</td>
<td>1 1/2&quot; x 20ga.</td>
</tr>
<tr>
<td>C</td>
<td>Stud</td>
<td>3</td>
<td>1 1/2&quot; x 20ga.</td>
</tr>
<tr>
<td>C1</td>
<td>Double Stud</td>
<td>2</td>
<td>1 1/2&quot; x 20ga.</td>
</tr>
<tr>
<td>D</td>
<td>Strap</td>
<td></td>
<td>2&quot; x 16ga.</td>
</tr>
<tr>
<td>E</td>
<td>Blocking</td>
<td>3</td>
<td>1 1/2&quot; x 20ga.</td>
</tr>
</tbody>
</table>
Notes:

1. Joists align over wall studs (TYP)
2. Jamb members must be carried down all walls to foundation. (TYP)
4. Headers for openings may be located directly above opening or at joist bearing. When located at window head, cripple studs must be tightly seated for full bearing.

Typical Wall Framing Elevation---2 Story
TYPICAL ARCH OPENING DETAIL

Radius Per Arch. Plan

20 gage Arched Track-- Notch as req'd

Beam/Header
Use STD Track nearest to 2 X member width (U.N.O.) use schedule track at header

Use STD Track nearest to 3 X member width (U.N.O.)

Use STD Track nearest to 4 X member width (U.N.O.)

#10 @ 12” O.C. each side (Typ. T&B)

See Plan for member size

20 gage DEEP Leg Track - Typ. (U.N.O.)

Turn bottom track down at header

#10 Screws @ 12” O.C. each side (Typ. T&B)

20 gage DEEP Leg Track - Typ. U.N.O. (T&B)

BEAM/HEADER

BEAM

BEAM

TYPICAL BOXED HEADER AND BEAM DETAILS
NOTE:
Vertical Heel Member may be screwed directly to stud without the use of a connector.

Top Track W/Skewed Flanges (TYP)

Vertical Stud Member

Exterior Studs (TYP)

Cont. 20 ga. bent Pl Angle W/2–#10 each Stud/Truss Location

TRUSS CONNECTION TO FACE OF STUD

PCE 25TC20 W/ 4–#12 to Stud & 3 # 12 to each Side Vert.

Strut

Bottom Chord Member

Top Chord Member

Roof Sheathing

E.N

SEE TRUSS PROFILE FOR HEEL

Samples from www.AutoCADDetails.net
TopTrack Beam

Stud

See Plan A, A/ for size

II

I-

I

l- f-

Full Height Stud with 4- #10 (Typ) each side)

Fill with Studs per plan

Notch Flange of Track then Bend UP

Beam

2 #10 ea. Beam Member (Typ)

PLAN SEC. A-A

TYPICAL DROPPED BEAM TO WALL CONNECTION
Non-Metalic Electrical Cable (Romex)

Provide Plastic Grommet in Prepunched hole in stud web (Typ)

Stud. See Plans for req'd size.

#6 Screws

Electrical Box w/ outboard attachment flanges

TYPICAL ELECTRICAL ATTACHMENT DETAIL
### TYPICAL GUSS TRUSS ELEVATION

**NOTE:**
Where shear wall occurs
Below and heel dimension
Exceeds 10°—Frame truss
To inside face of stud &
Connect per detail Ref.

<table>
<thead>
<tr>
<th>MARK</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>SIZE</th>
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<tbody>
<tr>
<td>A</td>
<td>Bottom Chord</td>
<td>25TC20</td>
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</tr>
<tr>
<td>B</td>
<td>Top Chord</td>
<td>25TC20</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Web</td>
<td>15TW20</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Heel</td>
<td>15TW20</td>
<td></td>
</tr>
</tbody>
</table>
NOTE:
Where shear wall occurs
Below and heel dimension
Exceeds 10"–Frame truss
To inside face of stud &
Connect per detail Ref.

<table>
<thead>
<tr>
<th>MARK</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>SIZE</th>
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<tbody>
<tr>
<td>A</td>
<td>Bottom Chord</td>
<td>25</td>
<td>TC20</td>
</tr>
<tr>
<td>B</td>
<td>Top Chord</td>
<td>25</td>
<td>TC20</td>
</tr>
<tr>
<td>C</td>
<td>Web</td>
<td>15</td>
<td>TW20</td>
</tr>
<tr>
<td>D</td>
<td>Heel</td>
<td>15</td>
<td>TW20</td>
</tr>
</tbody>
</table>
20 Ga. Bent Plate Ridge

SLOPE

Truss

20 Ga. Bent Plate Hip

SLOPE

Girder Truss May Occur at location than that shown

2A + 1/42

FLAT TOP CHORD

Edage of Plywood

Step Down Girder Truss

Do not notch turned down lip of Girder Truss Chord (TYP)

SLOPE

TYPICAL HIP ROOF PLAN

SLOPE

Hip Truss

Hip Truss
### TYPICAL HOLDOWN DETAIL AND SCHEDULE

<table>
<thead>
<tr>
<th>Holdown</th>
<th>A.B</th>
<th>DIM</th>
<th>DIM</th>
<th>FASTENERS</th>
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<tr>
<td>LTT19</td>
<td>3/4&quot;</td>
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<td>12&quot;</td>
<td>10--10</td>
</tr>
<tr>
<td>LTT20</td>
<td>1/2&quot;</td>
<td>1 1/2&quot;</td>
<td>12&quot;</td>
<td>10--10</td>
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<tr>
<td>LTT20B</td>
<td>3/4&quot;</td>
<td>1 1/2&quot;</td>
<td>12&quot;</td>
<td>24--10</td>
</tr>
<tr>
<td>MTT28B</td>
<td>3/4&quot;</td>
<td>1 1/2&quot;</td>
<td>14&quot;</td>
<td>17--10</td>
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<td>7/8&quot;</td>
<td>1 1/2&quot;</td>
<td>15&quot;</td>
<td>30--#10</td>
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</table>

**NOTE:**
- Bolt projection shall be the same as thread length. U.N.O.
- Face of stud web—(Holdown must be bolted through studs when they are oriented toe to toe)
- #10 Screws Per Schedule
- Double Stud (See Plan) Bottom Track
- Embedded Holdown (Where occurs)
- Anchor Bolt -Where occurs (See Schedule)
TYPICAL KING POST TRUSS PROFILE
Typical Connection of studs to track
16 gage Plate each side

7/8" Min. Between Screws & End of Lintel Web

#6 Screws @ 12" O.C.

#10 or #12 Screws as req'd by design)

TYPICAL LINTEL BEAM CONNECTION
(ALTERNATE)
TYPICAL LINTEL BEAM CONNECTION

Samples from www.AutoCADDetails.net
TYPICAL OVERFRAME
(CALIFORNIA FRAMING)
TRUSSES
2" x 2" x 4" Long x 20ga. Bent Plate W/2--#10 each Leg--TYP. Each Framing Member

Cont. 20 ga. Valley Plate W/1-#10 each Leg to each Truss & Framing Member

350WCS20 Framing At 24" O.C. (TYP)

TYPICAL OVERFRAME DETAIL
TYPICAL PLASTER SOFFIT DETAIL
2" X 2" X 20 Gage Angle

#8 Screws

Track Stud (See plan for req'd size)

Bottom Track

TYPICAL POST SHELF DETAIL
TYPICAL RAFTER FRAMED ROOF SECTION
TYPICAL RAFTER FRAMED VAULTED/CATHEDRAL CEILING
Rafter and/or
Joist Bridging

Ridge Board

Gable End

Truss
Cathedral
Collar Tie
Roof Domer Framing

TYPICAL ROOF FRAMING PLAN
NOTE:
MODIFY QUANTITY OF WEB MEMBERS AS REQ'D BASED ON DESIGN

TYPICAL SCISSORS TRUSS PROFILE
NOTES:

* Member sizes shown in this detail are typical except as otherwise shown on the plans or specific panel elevations.

All studs shall be spaced at 24” O.C. except as shown otherwise and as noted below.

Load bearing studs shall be spaced so as to fall directly under roof trusses/rafters or under floor joists.

<table>
<thead>
<tr>
<th>Mark</th>
<th>Description</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Top Track</td>
<td>350120DL</td>
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<tr>
<td>B</td>
<td>Bottom</td>
<td>350120DL</td>
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<tr>
<td>C</td>
<td>Track</td>
<td>350WCS20</td>
</tr>
<tr>
<td>C1</td>
<td>Stud</td>
<td>(2)350WCS20</td>
</tr>
<tr>
<td>D</td>
<td>Lintel Beam</td>
<td>See Plan</td>
</tr>
<tr>
<td>E</td>
<td>Header</td>
<td>350120</td>
</tr>
<tr>
<td>F</td>
<td>Sill</td>
<td>See Detail</td>
</tr>
<tr>
<td>H</td>
<td>Strap</td>
<td>2'x16 ga.</td>
</tr>
<tr>
<td>J</td>
<td>Strap</td>
<td>350B20</td>
</tr>
<tr>
<td>K</td>
<td>Blocking</td>
<td>350120</td>
</tr>
<tr>
<td></td>
<td>Lintel Track</td>
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</tr>
</tbody>
</table>

TYPICAL SHEAR PANEL ELEVATION
First Floor Shear Panel

Second Floor Shear Panel

Provide double studs under girder truss (Where occurs)

FLR. Line

SCHEDULE

<table>
<thead>
<tr>
<th>MARK</th>
<th>DESCRIPTION</th>
<th>SIZE *</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>Top Track</td>
<td>3 1/2&quot; x 20 ga.</td>
</tr>
<tr>
<td>B</td>
<td>Bottom Track</td>
<td>3 1/2&quot; x 20 ga.</td>
</tr>
<tr>
<td>C</td>
<td>Stud</td>
<td>3 1/2&quot; x 20 ga.</td>
</tr>
<tr>
<td>C1</td>
<td>Double Stud</td>
<td>(2) 3 1/2&quot; x 20 ga.</td>
</tr>
<tr>
<td>C2</td>
<td>Double Stud</td>
<td>(2) 3 1/2&quot; x 20 ga.</td>
</tr>
<tr>
<td>D</td>
<td>Rim Joist</td>
<td>See Plan</td>
</tr>
<tr>
<td>E</td>
<td>Header</td>
<td>See Plan</td>
</tr>
<tr>
<td>F</td>
<td>Sill</td>
<td>3 1/2&quot; x 20 Ga.</td>
</tr>
<tr>
<td>G</td>
<td>Diag. Strap</td>
<td>See Detail</td>
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<tr>
<td>H</td>
<td>Horiz. Strap</td>
<td>2' x 16 ga.</td>
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<tr>
<td>J</td>
<td>Blocking</td>
<td>3 1/2&quot; x 20 ga.</td>
</tr>
<tr>
<td>K</td>
<td>Header Track</td>
<td>3 1/2&quot; x 20 ga.</td>
</tr>
</tbody>
</table>

All studs shall be spaced at 24" O.C. except as shown otherwise and as noted herein.

Notes:
* Member sizes shown in this detail are typical except as otherwise shown on the plans or specific panel elevations.

Type "C" Bracing may be oriented as shown here where opening occurs in wall or as specified on plans.

Shear Wall Gusset Plate & holdown

Where Diag. strap is screwed directly to Rim joist provide 2" x 16 ga. strap at D8L studs w/screws each end per schd.

Provide cont. horiz. strap at load Brg. walls over 12'-0" high only or as shown on panel elevations.

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Provide cont. horiz. strap at load Brg. walls over 12'-0" high only or as shown on panel elevations.
Box Beam or Header

Cut & Bend 1 5/8” Track as shown to form stair tread and riser (Typ)

2” x 2” x 16 Ga. Angle W/4—#10 Screws each leg #10 Screws (Typ)

Filler Studs as Req’d

Tracked stringer (8WCS16 W/8T20DL U.N.O.) at 24” O.C. (Typ)

TYPICAL STAIR STRINGER CONNECTION
1/2" x 10" A.B. @ 6'-0" O.C. (Typ. U.N.O.) 9" from ends. min. 2 per track section.

Studs

Track—See Panel Elevations

Concrete Slab or Footing

10" Min Embedment into Footing (Typ)

NOTE:

Power driven fasteners cannot be used in a two pour system

ANCHOR BOLT DETAIL

0.177" x 1 1/2" Power Driven Fasteners @ 4' O.C. (Typ. U.N.O.) 9" from ends min. 2 per track section.

Monolithic Concrete Slab & Footing (See Note)

SHOT PIN DETAIL

3" Min to Edge

TYPICAL TRACK ANCHORAGE DETAIL AT EXTERIOR WALL ON SLAB
Place Screws Symmetrically about Center line of Web Member (TYP)

Provide Scheduled No. of Screws per End (SPE) through Gusset PI into Web Member, with same no. of screws into Chord. (TYP)

Place Gusset Between Web & Chord Members on Both Sides of Truss (TYP)

Gusset PI Shall Be Sized to Accomdate Scheduled No. of Screws. (TYP)

TYPICAL TRUSS GUSSET
Valley Flashing

(1) Screw @ each Rafter or Truss

VALLEY FLASHING DETAIL

Samples from www.AutoCADDetails.net
* Locate Blocking at each end of wall, @ 10'-0" O.C. between & adjacent to openings.
* FOR TRACK:
  Where blocking material thickness allows, notch and bend flanges 90 degs or anchor to verticals w/clip angles.
* Lap splice straps min. 4"

SOLID
BLOCKING

Flat Straps,
Notched channel,
X-bridging or
propriety bridging
(each side)

Screws as
required.
(each side)

Screws as
required each stud

NOTE:
NUMBER OF ROWS OF BRIDGING AS REQ"D BY DESIGN
Clip angle 1/4" less than stud width. Attach with 4 screws as shown.

Cold-rolled channel horizontal bridging to be spaced as req'd by design.

WALL BRIDGING (ALTERNATE)
WALL HORIZONTAL BLOCKING /BRIDGING DETAIL

2" x 20 ga Cont. Strap

#8 or #10 Self drilling screw

4--#8 or #10 Self Drilling Screw

20Gage X 2" Horizontal Strap
Cope Flanges of one Top Chord for Lap

Screws By Design

Continuous Channel Bridging as Req'd

WEB AT PEAK OF TRUSS DETAIL
Continuous Channel Bridging as Req’d

Screws By Design

WEB TO BOTTOM CHORD DETAIL
WEB TO BOTTOM CHORD DETAIL

Continuous Channel Bridging as Req'd

Screws By Design
WEB TO TOP CHORD DETAIL

Rafter

Screws By Design

Continuous Channel Bridging as Req'd
Opening greater than 4'-0"
LOAD BEARING WALL

Jamb @ top of wall

Top Track

Opening greater than 4'-0"
LOAD BEARING WALL

Opening Sill, see dtl

Head Track

OPNG TYP

Sill Track

Double Jamb Stud

Jamb at bottom of wall

Bottom Track

Stud

WINDOW OPENING GREATER THAN 4 FEET--NON-LOAD BEARING
WINDOW OPENING GREATER THAN 4 FEET WIDE --- LOAD BEARING
WINDOW OPENING LESS THAN 4 FEET WIDE---NON-BEARING
Jamb at top of wall

Opening less than 4'-0"
Load Bearing Wall

Jamb at bottom of wall

TopTrack

Double Jamb Stud

Header

Opening

Head Track

Sill Track

Bottom Track

Opening sill--single track

WINDOW OPENING LESS THAN 4 FEET WIDE---NON-BEARING
Wood Planking

Wood joists align with wall stud below

2 Rows of solid blocking between joists

Sheathing (OSB or Plywood)

Multiple Joist Members as Req'd

CANTILEVER LENGTH IS LIMITED BY JOIST DEPTH AND/OR IF LOAD-BEARING WALL IS PRESENT AT CANTILEVER END.

2 X LENGTH (MIN)

NOTES:
1. Balconies require special detailing and consideration for protection against thermal bridging.
2. Where axial members do not align vertically, provide detail.

WOOD DECK BALCONY
NOTE:
FOR TRUSS MEMBER CROSS SECTION SEE GUSS TRUSS MEMBER SECTION

Wood Rafter

See TRUSS Profile for HEEL Dim.

Cont. 20 gage Plate attach to TOP CHORD W/2 --#10 Screws ea.

Wood Rafter Tail Connection to Gus Truss

3/1/4" x 1 1/2" LG. LAGS from TRUSS HEEL into end of RAFTER Tail (Pre-drill Holes)

FOR TRUSS CONNECTION SEE BOTTOM CHORD TO TOP PLATE CONNECTION

Wood Rafters

See Drawing for Fascia Cond.

3/1/4" x 1 1/2" LG. LAGS from TRUSS HEEL into end of RAFTER Tail (Pre-drill Holes)

FOR TRUSS CONNECTION SEE BOTTOM CHORD TO TOP PLATE CONNECTION

WODD RAFTER TAIL CONNECTION TO GUS TRUSS
NOTE:
Where axial load bearing members do not align vertically, provide detail

WOOD TAIL CONNECTION TO TRUSS
Cont. 20 ga. plate attach to Top Chord W/2-#10 Screws. (TYP)

NOTE: FOR TRUSS MEMBER CROSS SECTIONS

Bottom Chord to Top plate connection

See Arch. Drawings for Fascia condition.

ZERO OVERHANG--FLAT FASCIA
Cont. 20 ga. plate attach to Top Chord W/2-#10 Screws . (TYP)

Heel to be flush W/face of stud

Cont. 20 ga.
Deep Leg Track

See Truss Profile for Heel Dimension

For Truss Connection

See Arch. Drawings for Fascia condition.

NOTE: FOR TRUSS MEMBER CROSS SECTIONS

Top Track (TYP)

Top Chord Member

Vertical Strut Member

Bottom Chord Member

Roof Sheathing

ZERO OVERHANG--RAKED FASCIA