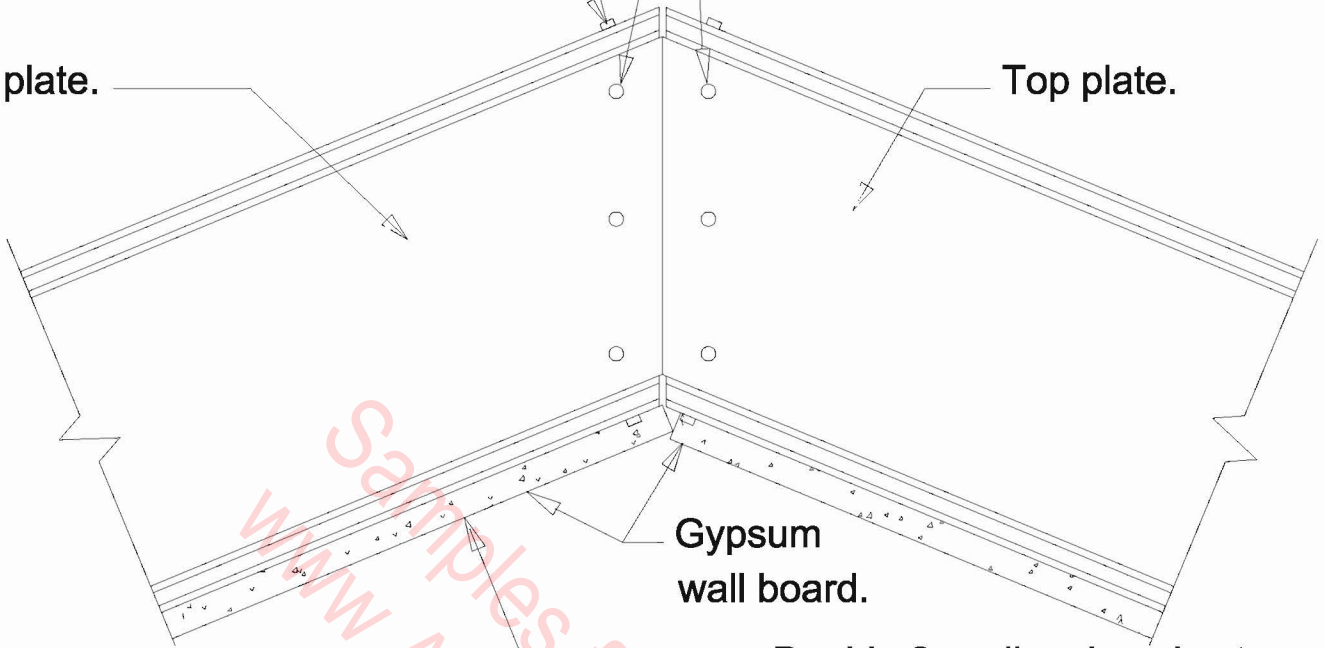


Fasten with 8d nails or  
14 ga. 1 1/2" staples  
@ 6" o.c. both sides of  
panel joint or equivalent.  
Typical each side of panel.

Nail top plate to vertical  
plate with 3-16d nails.

Top plate.

Top plate.



Gypsum  
wall board.

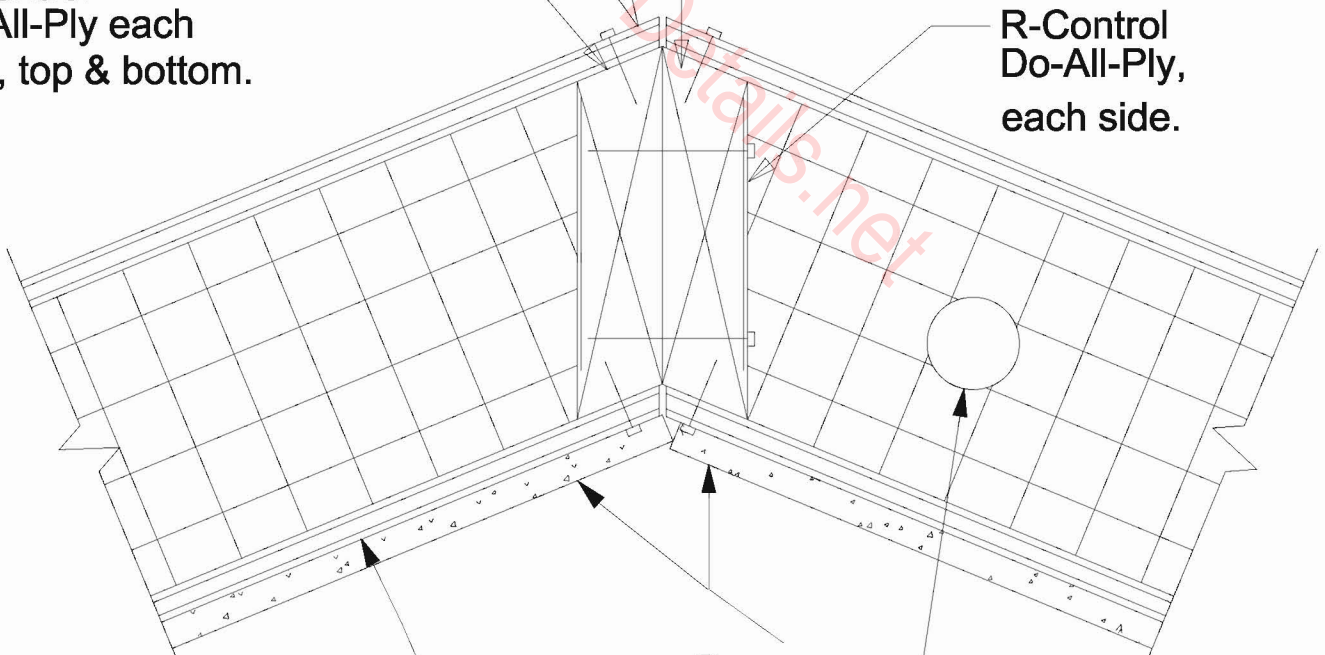
PLAN

R-Control

Double 2x spline, bevel cut,  
with 8d nails @ 12" o.c.  
two rows, staggered; &  
R-Control Do-All-Ply  
between 2x's.

R-Control  
Do-All-Ply each  
side, top & bottom.

R-Control  
Do-All-Ply,  
each side.



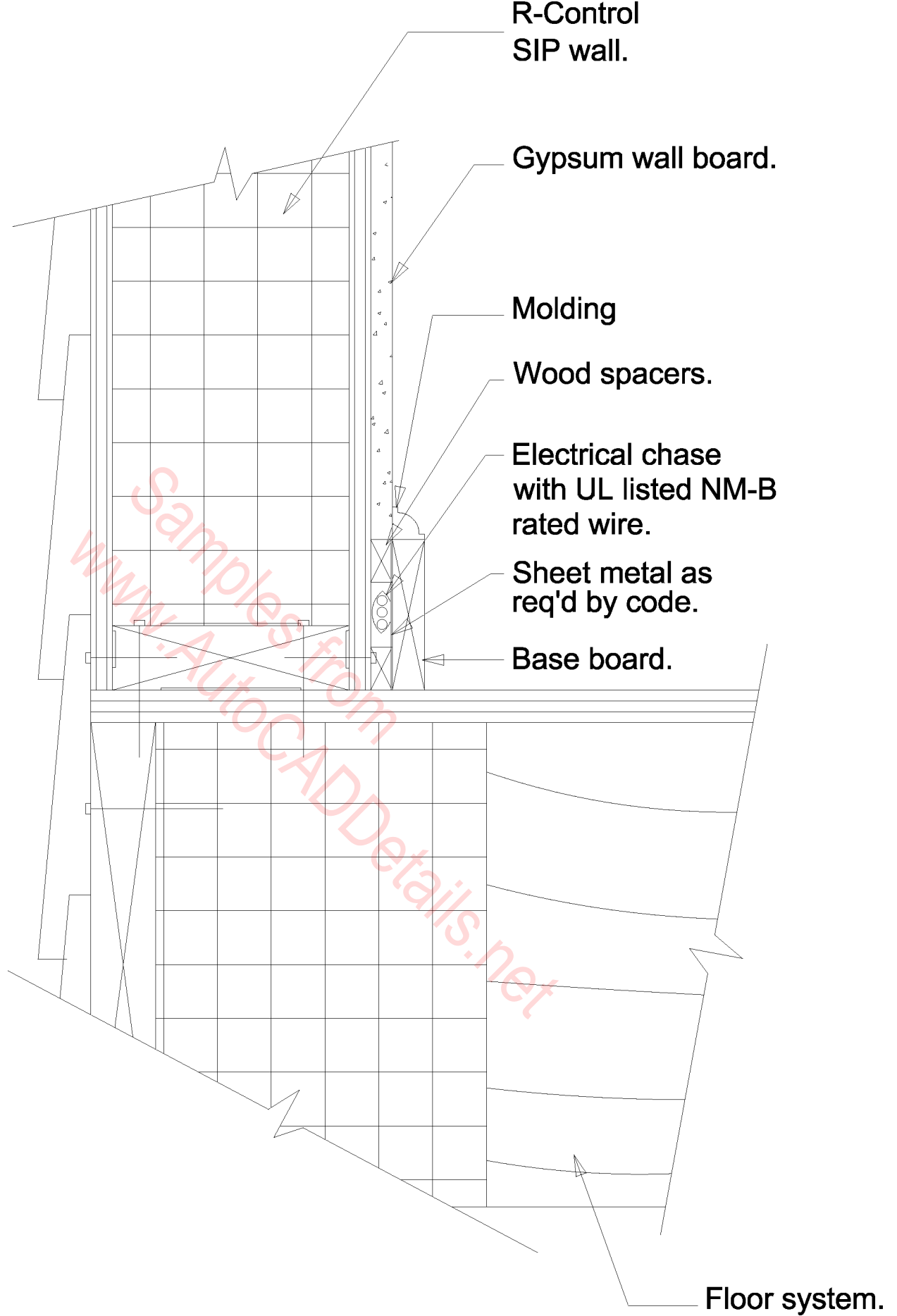
SECTION

Vapor  
retarder

Gypsum  
wall board

Optional factory  
electrical chase.

Angled Corner Connection



**SECTION**

**Base Board**

R-Control  
SIP roof

R-Control screw,  
see SIP-135 for  
spacing requirements.

R-Control  
Do-All-Ply  
continuous

Beveled 2x blocking,  
toe nail with 16d  
nails @ 12" o.c.  
top and bottom.

EPS wedge  
infill piece.

8d Nails or 14 ga. 1 1/2"  
staples @ 6" o.c. each  
side or equivalent.

D0-All-Ply  
continuous  
along eave line

R-Control  
Do-All-Ply,  
each side.

2x top plate.

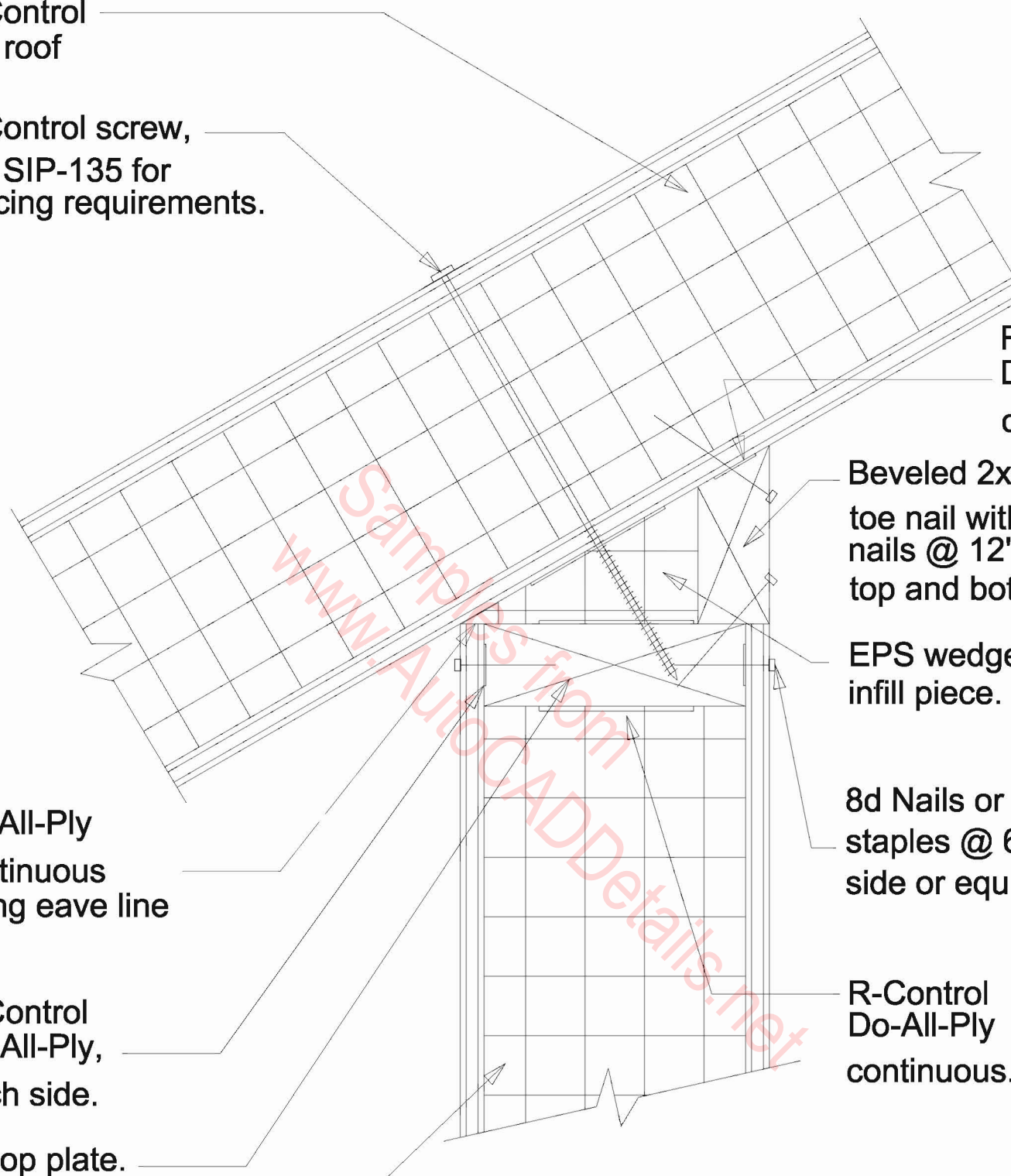
R-Control  
SIP wall.

R-Control  
Do-All-Ply  
continuous.

**SECTION**

Beveled 2x Blocking

www.AutocADDetails.net



R-Control  
SIP roof.

R-Control screw,  
see SIP-135 for  
spacing requirements.

R-Control  
Do-All-Ply,  
each side, and @ roof  
panel/2x joint.

Beveled 2x top plate.

R-Control  
SIP wall .

8d Nails or 14 ga.  
1 1/2" staples @  
6" o.c. each side  
or equivalent.

R-Control  
Do-All-Ply  
continuous.

**SECTION**

**Beveled Wall Panel**



R-Control  
SIP roof

R-Control screw,  
see SIP-135 for  
spacing requirements.

R-Control  
Do-All-Ply,  
each side, and @ roof  
panel/blocking joint.

2x top plate.

R-Control  
SIP wall.

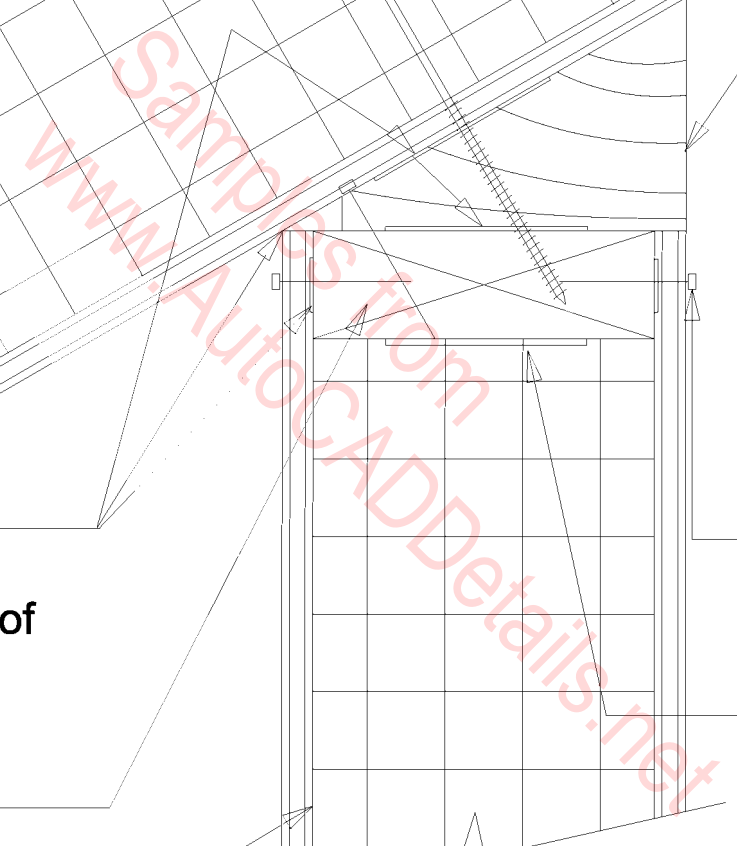
Beveled blocking,  
predrill for  
R-Control screw.  
Use 16d nails to  
attach blocking to  
top plate until  
screw is in place.

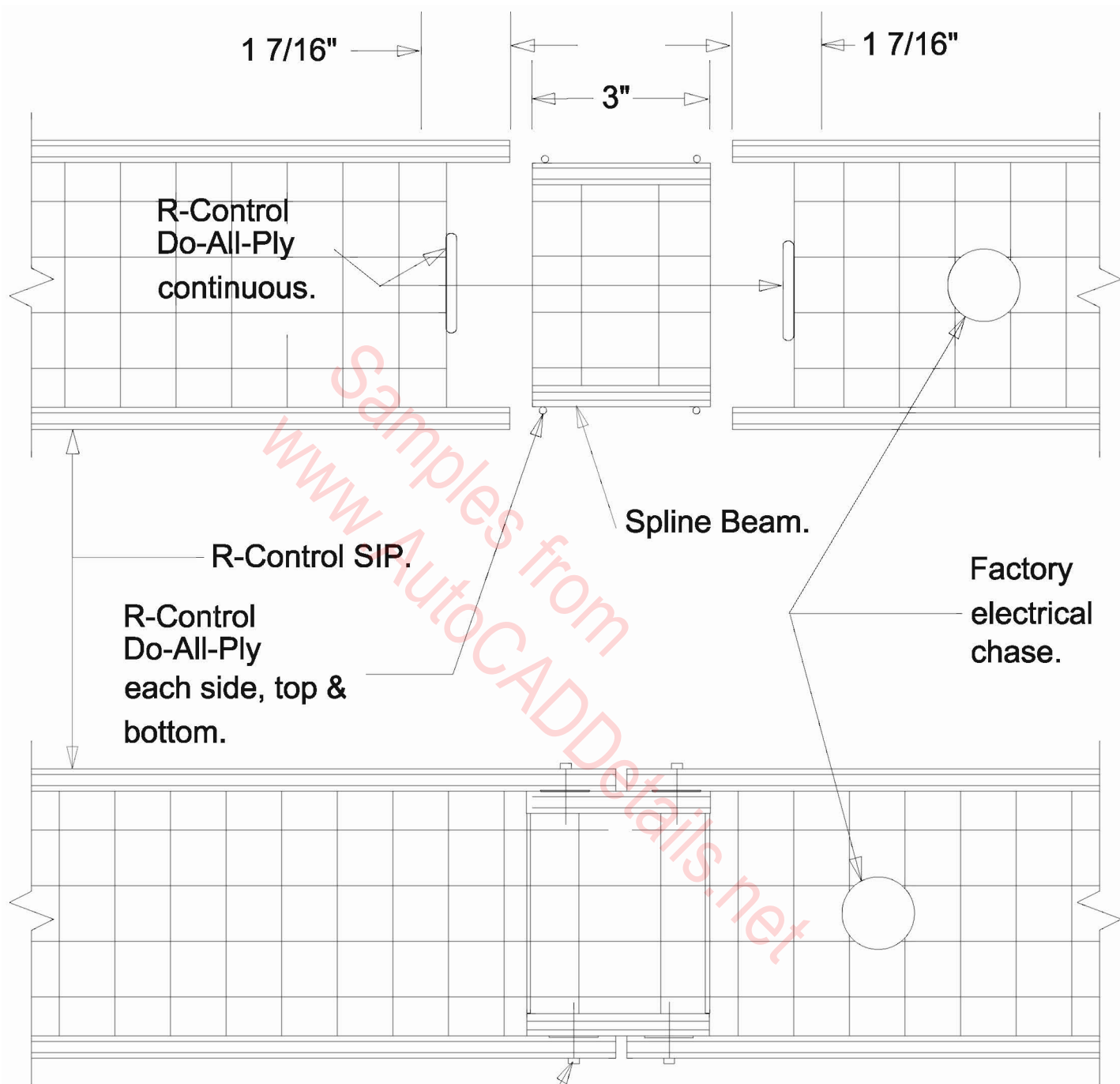
8d Nails or 14 ga. 1 1/2"  
staples @ 6" o.c. each  
side or equivalent.

R-Control  
Do-All-Ply  
continuous.

# SECTION

Beveled Wedge Blocking





1 7/16"

1 7/16"

3"

R-Control  
Do-All-Ply  
continuous.

Spline Beam.

Factory  
electrical  
chase.

R-Control SIP.

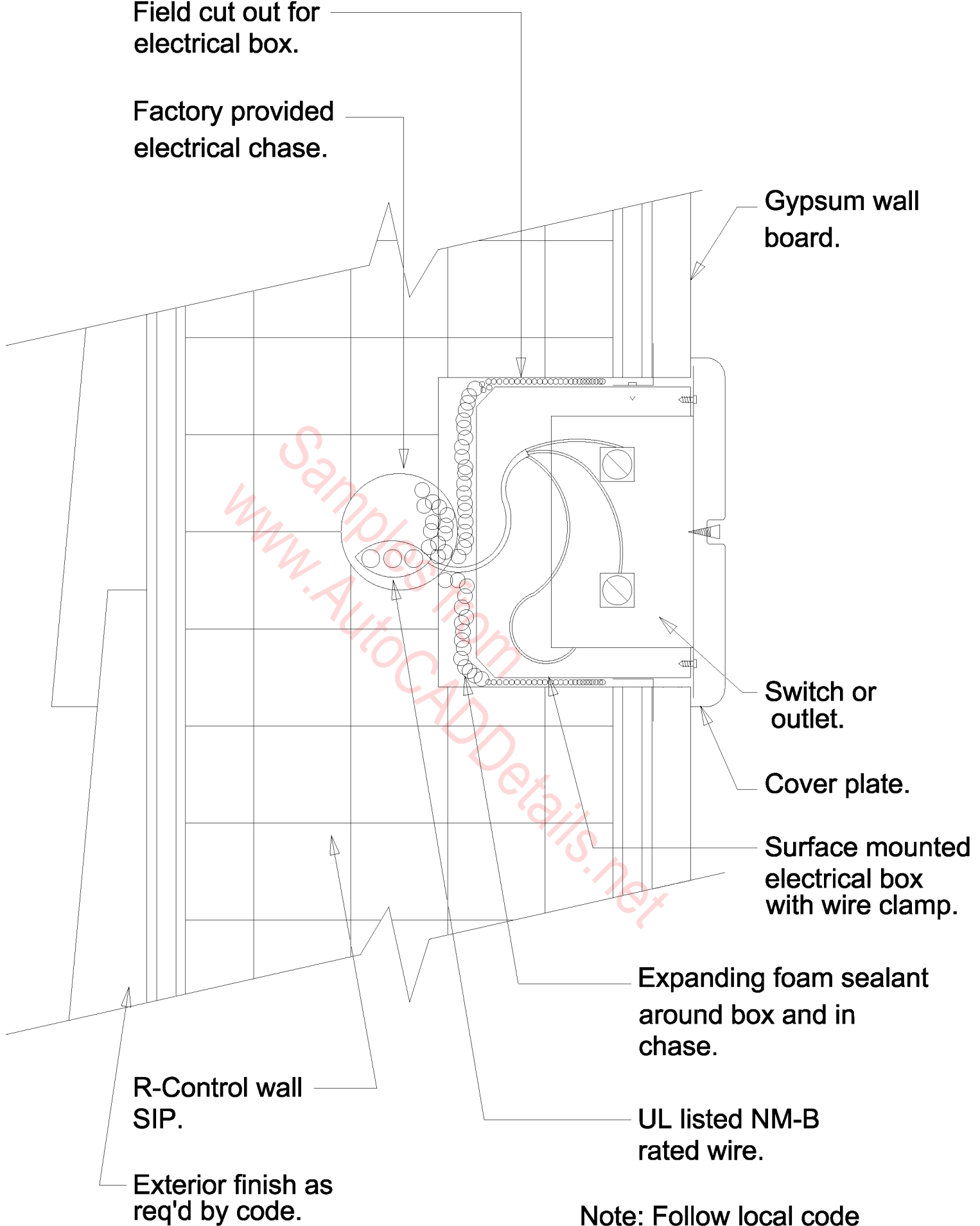
R-Control  
Do-All-Ply  
each side, top &  
bottom.

Fasten with 8d nails or  
14ga. 1 1/2" staples  
@ 6" o.c. both sides of  
panel joint or equivalent.  
Typical each side of panel.

Note: Vapor retarder  
recommended on interior of  
panel when mandated by  
code or climatic  
conditions.

**SECTION/PLAN**

TITLE: Block Spline  
Connection

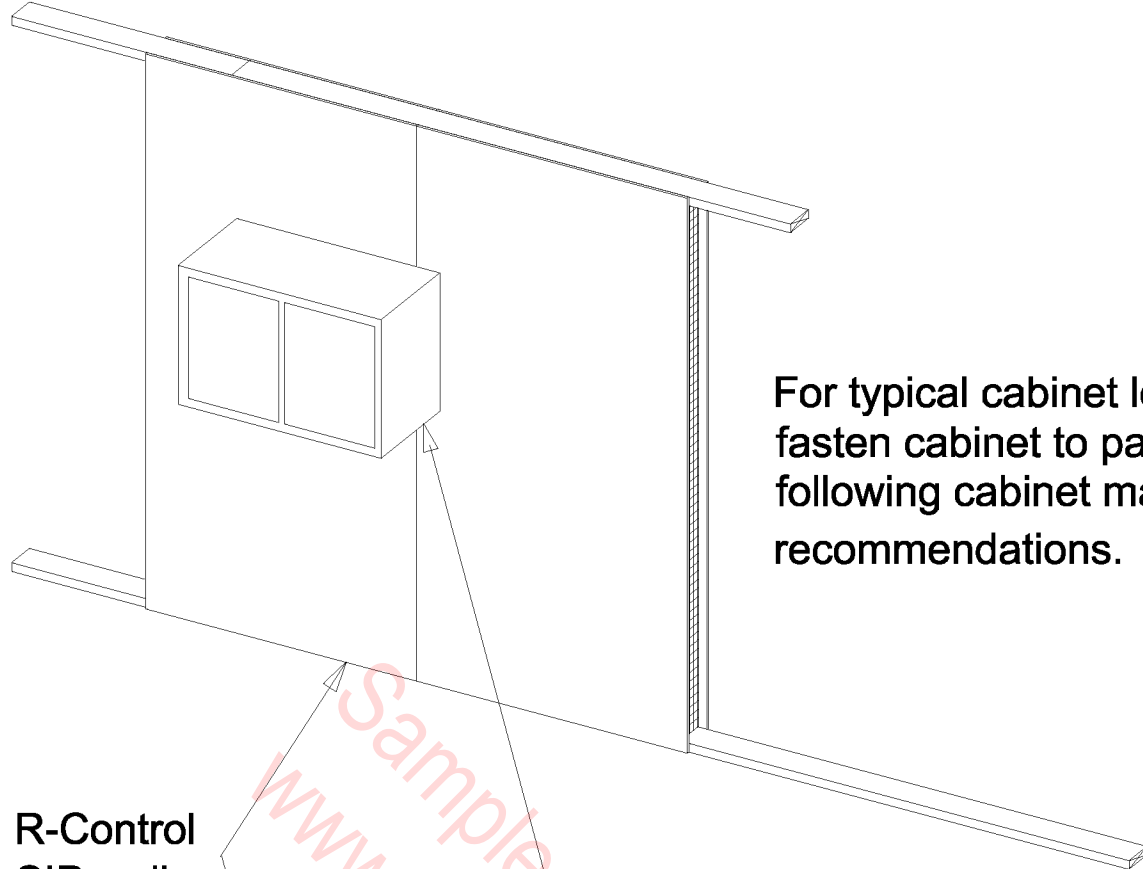


Sample from  
www.AutocADDetails.net

Note: Follow local code requirements for electrical installation.

# SECTION

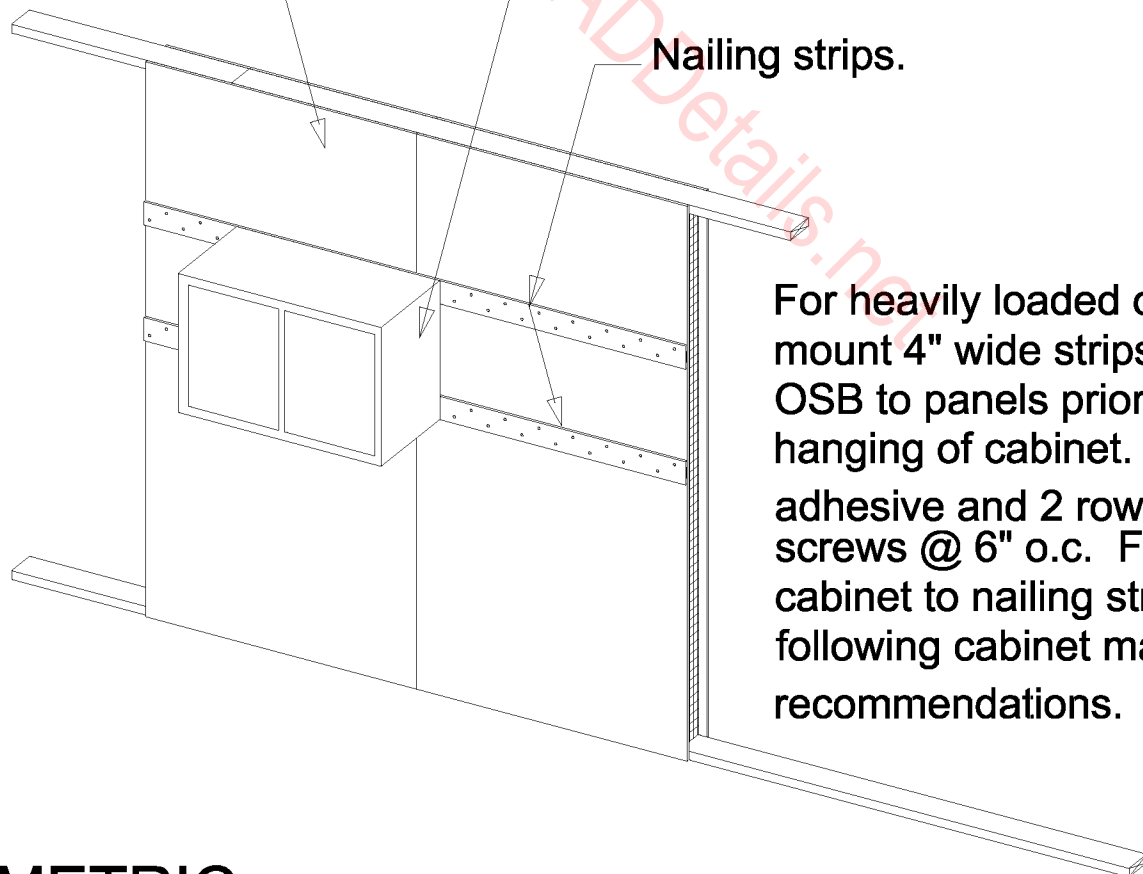
Box for Switch or Outlet



For typical cabinet loadings fasten cabinet to panels following cabinet manufacturer's recommendations.

R-Control SIP wall

Cabinet



Nailing strips.

For heavily loaded cabinets mount 4" wide strips of OSB to panels prior to hanging of cabinet. Use adhesive and 2 rows of #8 screws @ 6" o.c. Fasten cabinet to nailing strips following cabinet manufacturer's recommendations.

**ISOMETRIC**

**Cabinet Attachment**

Optional factory fabricated electrical chase.

R-Control SIP roof

UL listed NM-B rated wire.

Low expansion foam sealant

Field fabricated electrical chase.

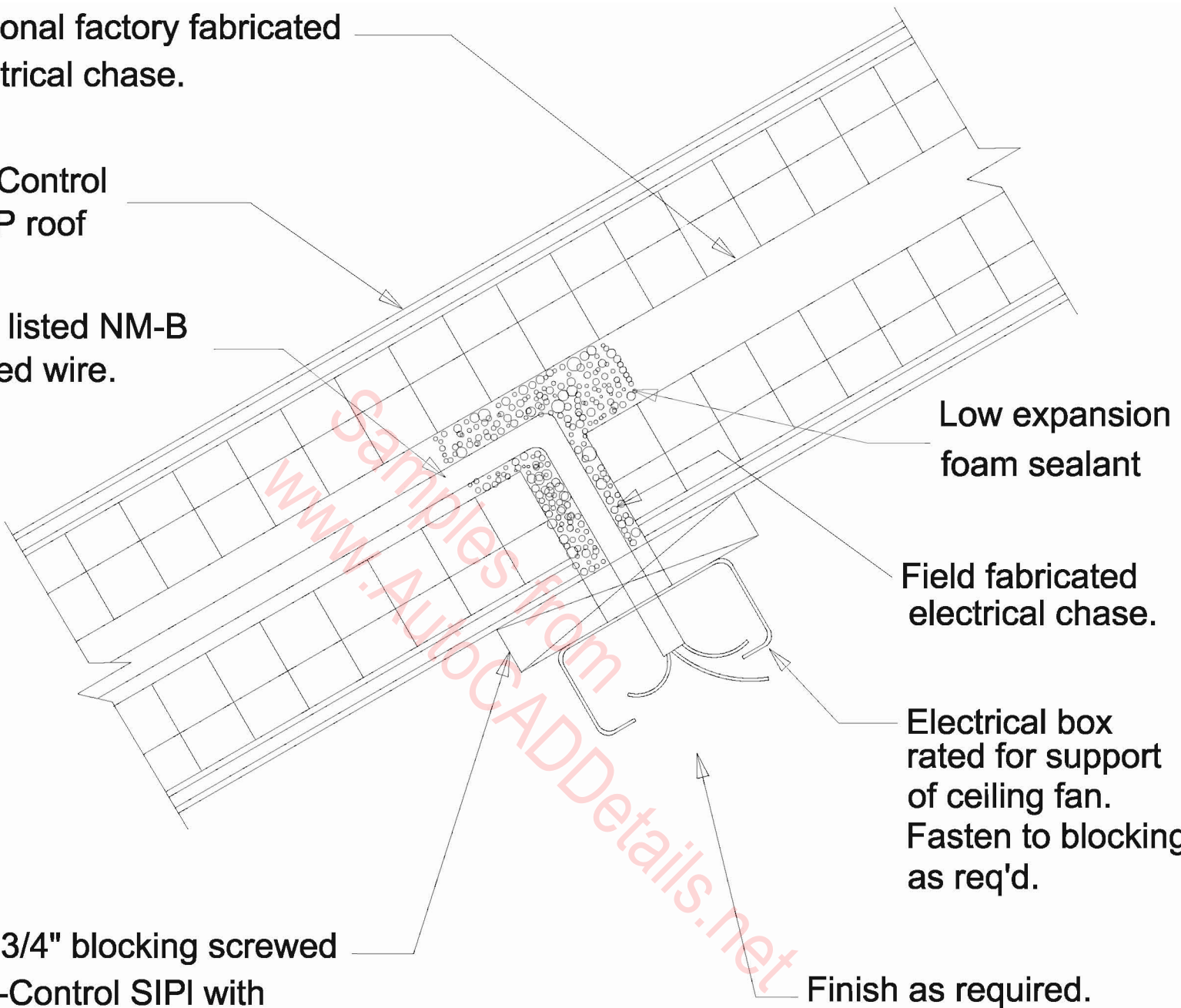
Electrical box rated for support of ceiling fan. Fasten to blocking as req'd.

Min 3/4" blocking screwed to R-Control SIP with 6-#6x2" dry wall screws, and wood adhesive. Drill hole through blocking for wiring.

Finish as required.

# SECTION

Ceiling Fan Attachment



Provide truss anchorages as req'd for each specific design. Truss anchors not shown in detail.

Roof decking.

For soffit framing see SIP-124.

8d Nails or 14 ga. 1 1/2" staples @ 6" o.c. each side or equivalent.

2x plate.

R-Control Do-All-Ply continuous.

R-Control SIP wall .

Rafter

R-Control SIP

R-Control Do-All-Ply, each side.

R-Control Screw Fastener, see SIP-135 for spacing requirements.

Note: Design member sizes and connections as req'd for each condition and/or project. Rafter spacing not to exceed 2'-0" o.c. without consulting R-Control for specific project load requirements.

## SECTION



Provide truss anchorages as req'd for each specific design. Truss anchors not shown in detail.

Plated wood truss.

For soffit framing see SIP-124.

8d Nails or 14 ga. 1 1/2" staples @ 6" o.c. each side or equivalent.

2x plate.

R-Control Do-All-Ply continuous.

R-Control SIP wall .

Note: If R-Control ceiling panel is to be attached to roof truss, general contractor must coordinate with truss mfg for additional bottom chord loading.

R-Control SIP

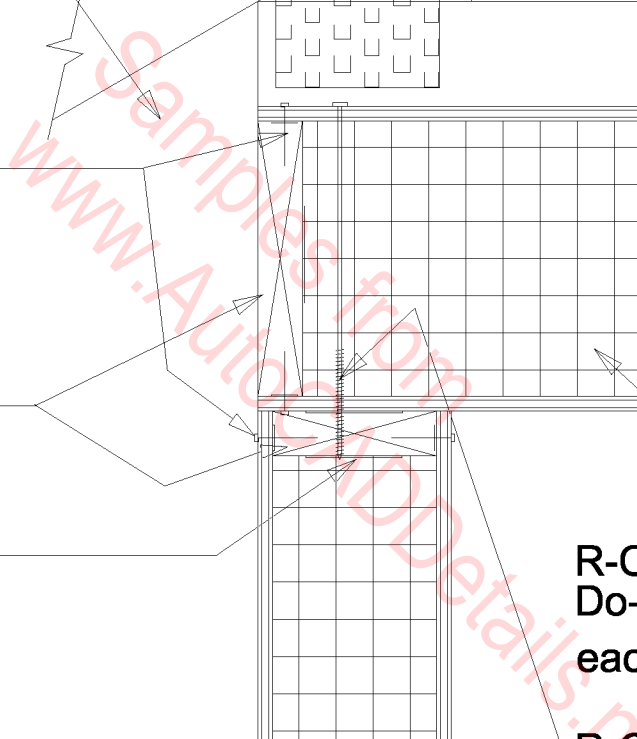
R-Control Do-All-Ply each side.

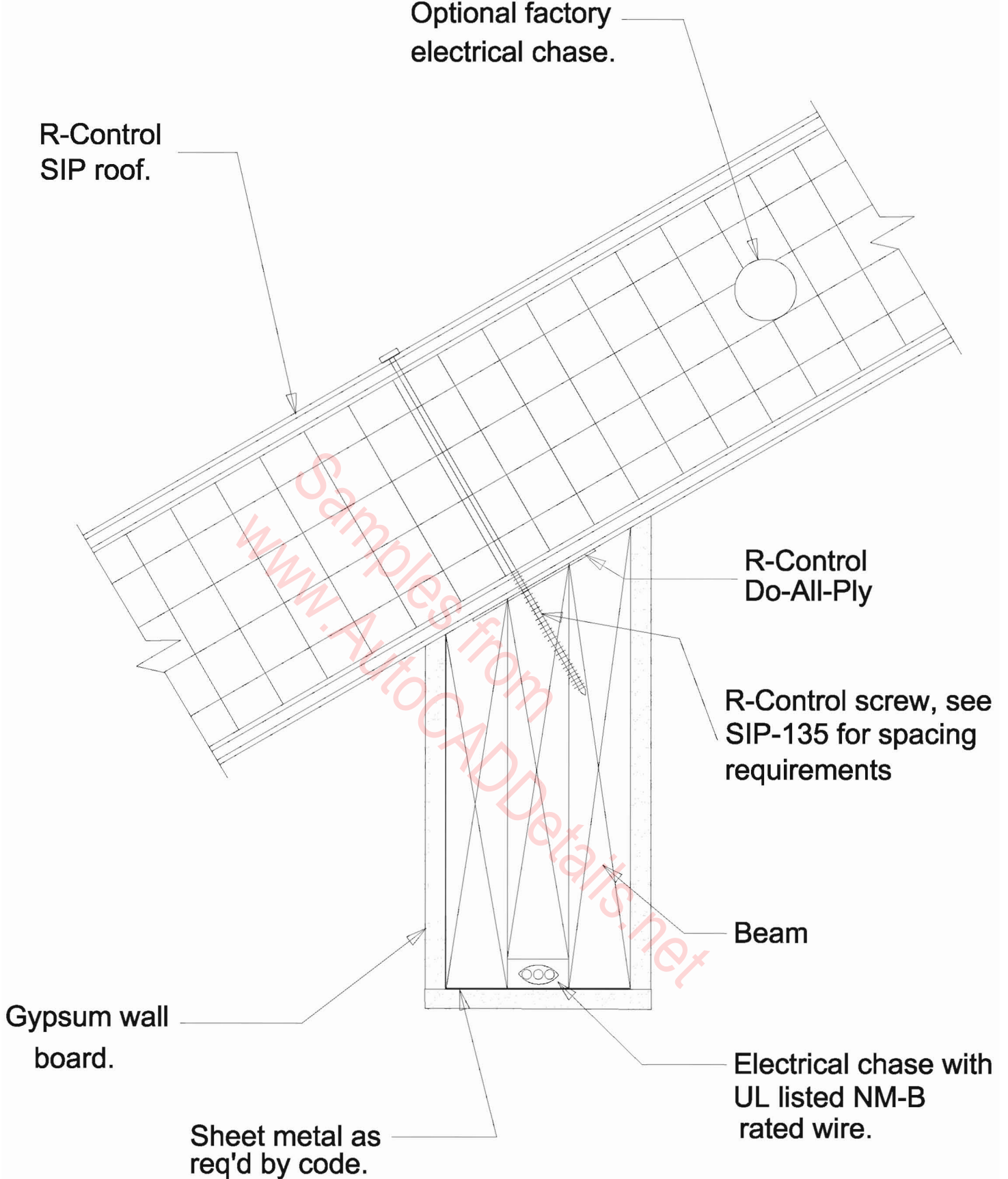
R-Control Screw Fastener, see SIP-135 for spacing requirements.

Note: Design member sizes and connections as req'd for each condition and/or project. Truss spacing not to exceed 2'-0" o.c. without consulting R-Control Building Systems for specific project load requirements.

## SECTION

### Ceiling Panels & Truss

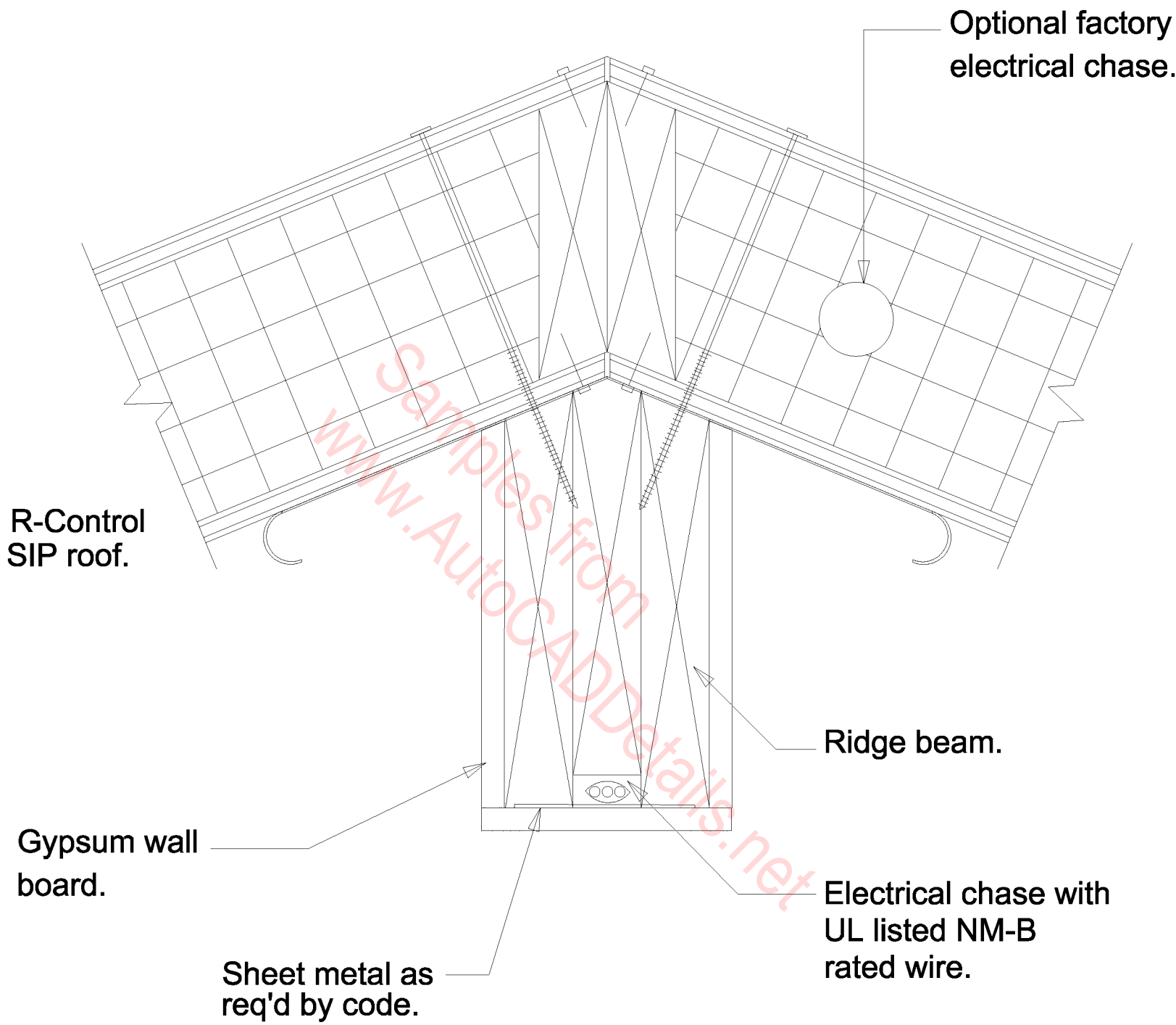




# SECTION

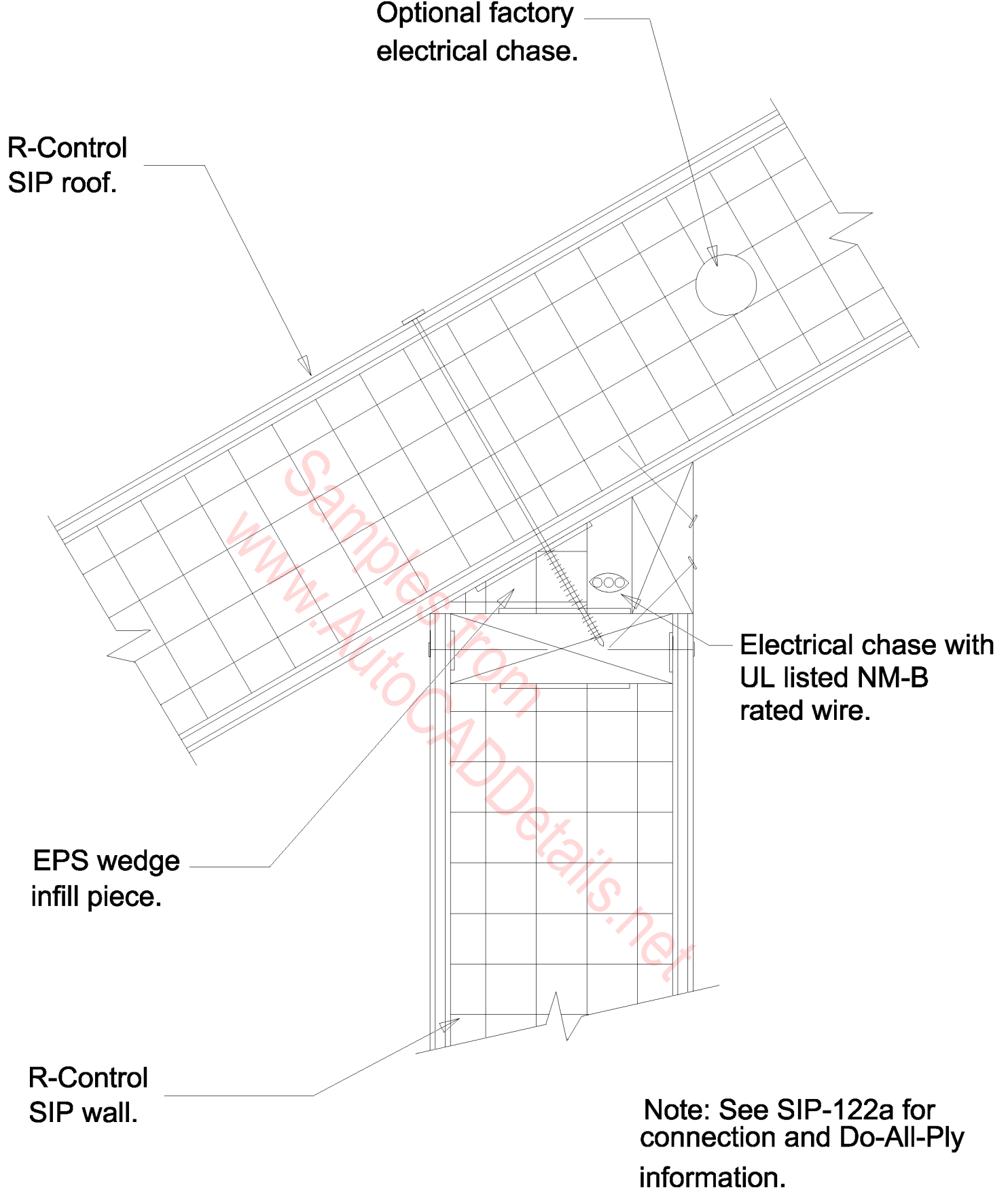
Chases - Electrical  
Intermediate Roof Beam

Note: See SIP-121 for connection and D0-All-Ply information.



# SECTION

Chases - Electrical  
Roof Ridge Beam

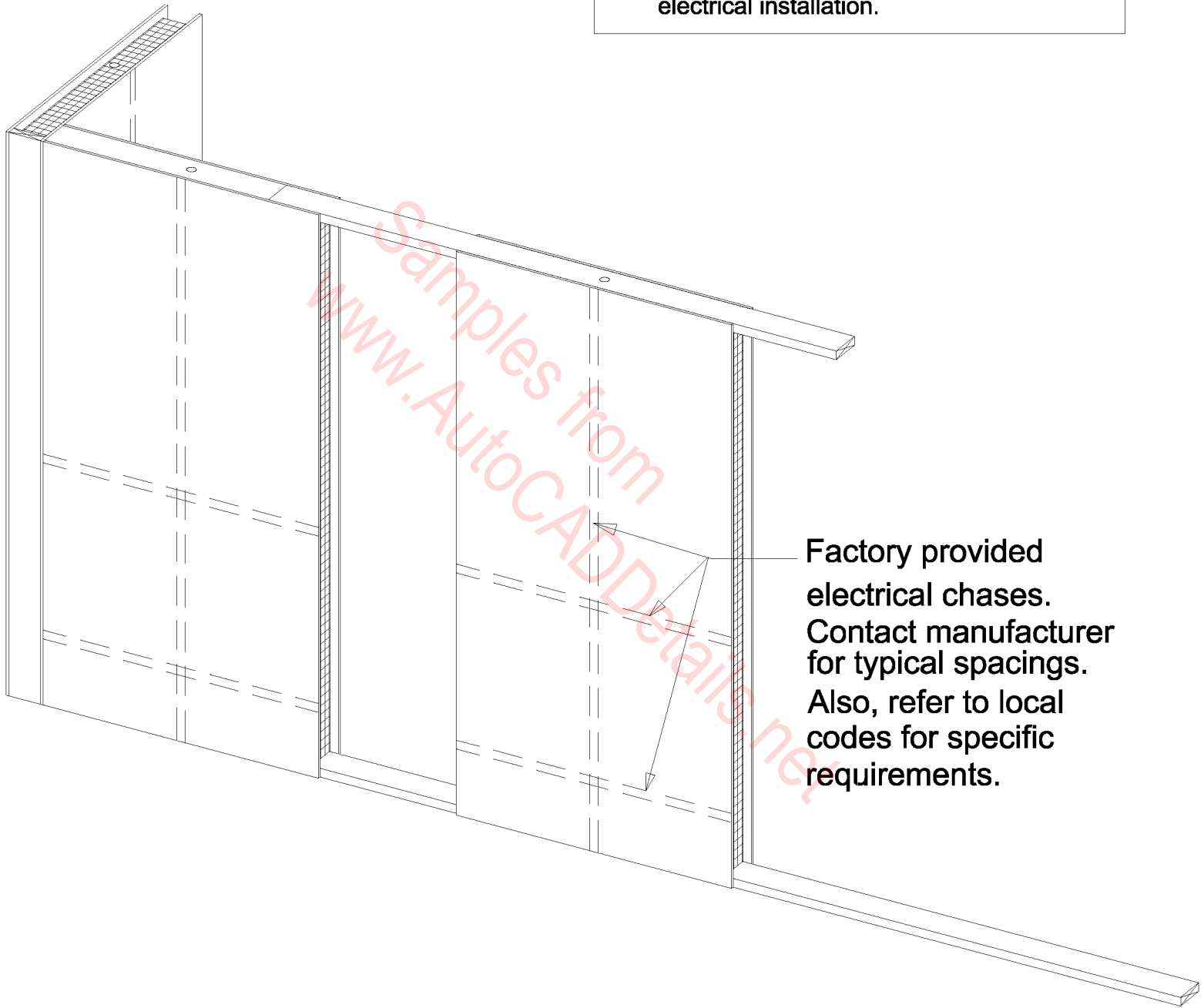


# SECTION

Chases - Electrical  
Roof / Wall Intersection

## Notes:

1. Factory provided electrical chases must be pre-arranged with the R-Control SIP manufacturer prior to fabrication of the panels.
2. Panel installer shall provide field drilled holes in top plates, sill/base plates, vertical plates and through floors to access electrical chases.
3. Follow local code requirements for electrical installation.



ISOMETRIC

Chases - Electrical

A

B

R-Control SIP roof.

See SIP-122 for wall connection.

Soffit vent.

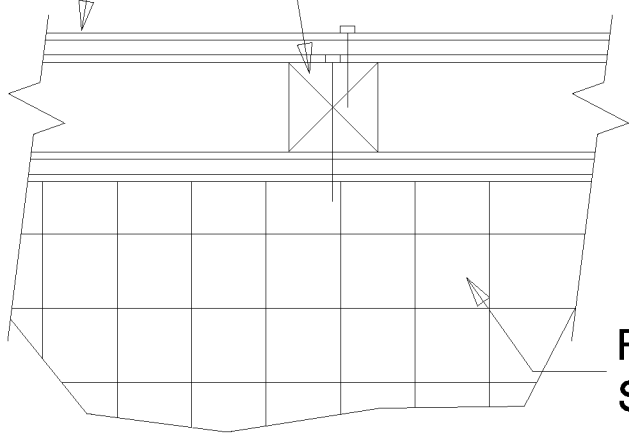
See SIP-119 for soffit information.

Note: Design member sizes and connections as req'd for each condition and/or project.

# SECTION

Roof sheathing with min 24/16 span rating.

2x2 @ 24" o.c.,

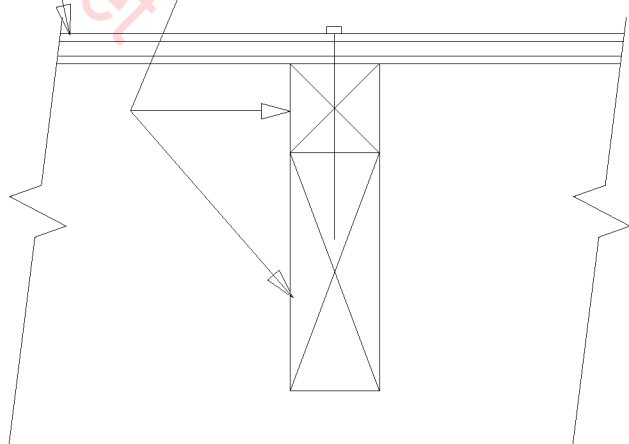


R-Control SIP roof.

## SECTION A

Roof sheathing with min 24/16 span rating.

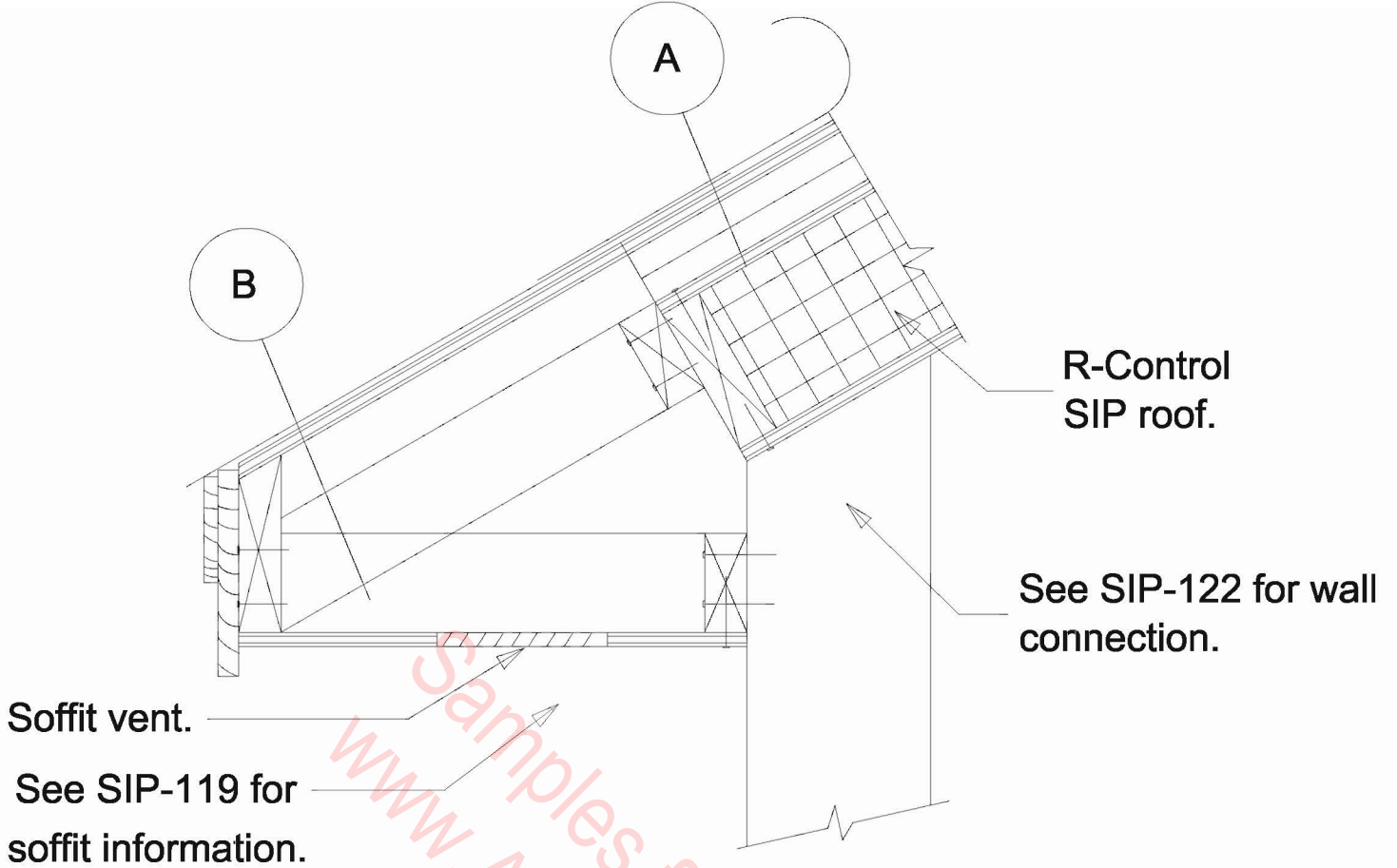
2x @ 24" o.c., maximum spacing.



## SECTION B

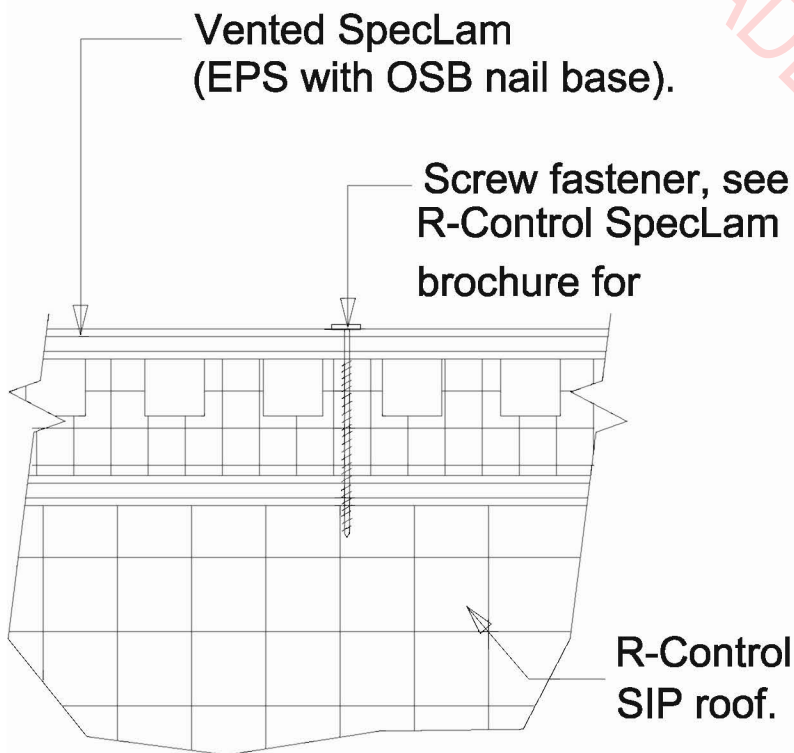
Cold Roof Eave with 2x Sleepers



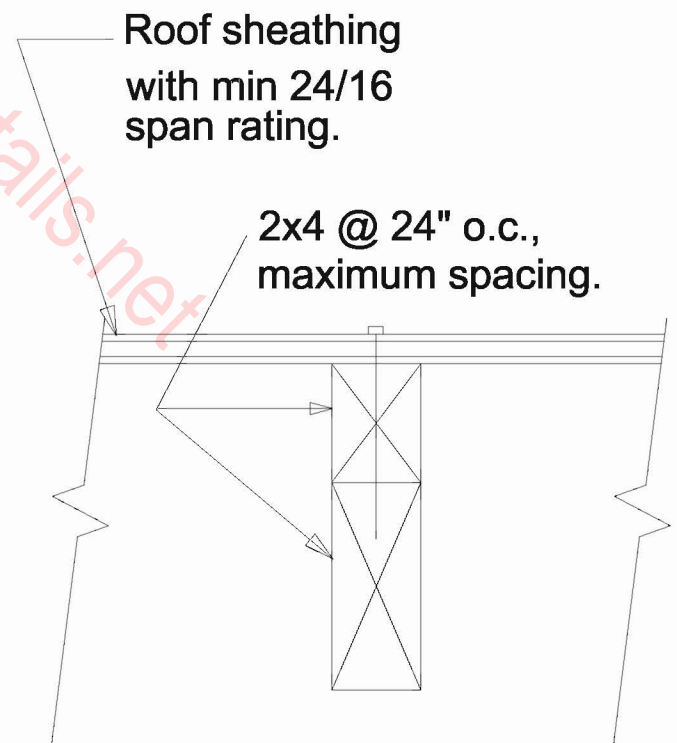


Note: Design member sizes and connections as req'd for each condition and/or project.

## SECTION

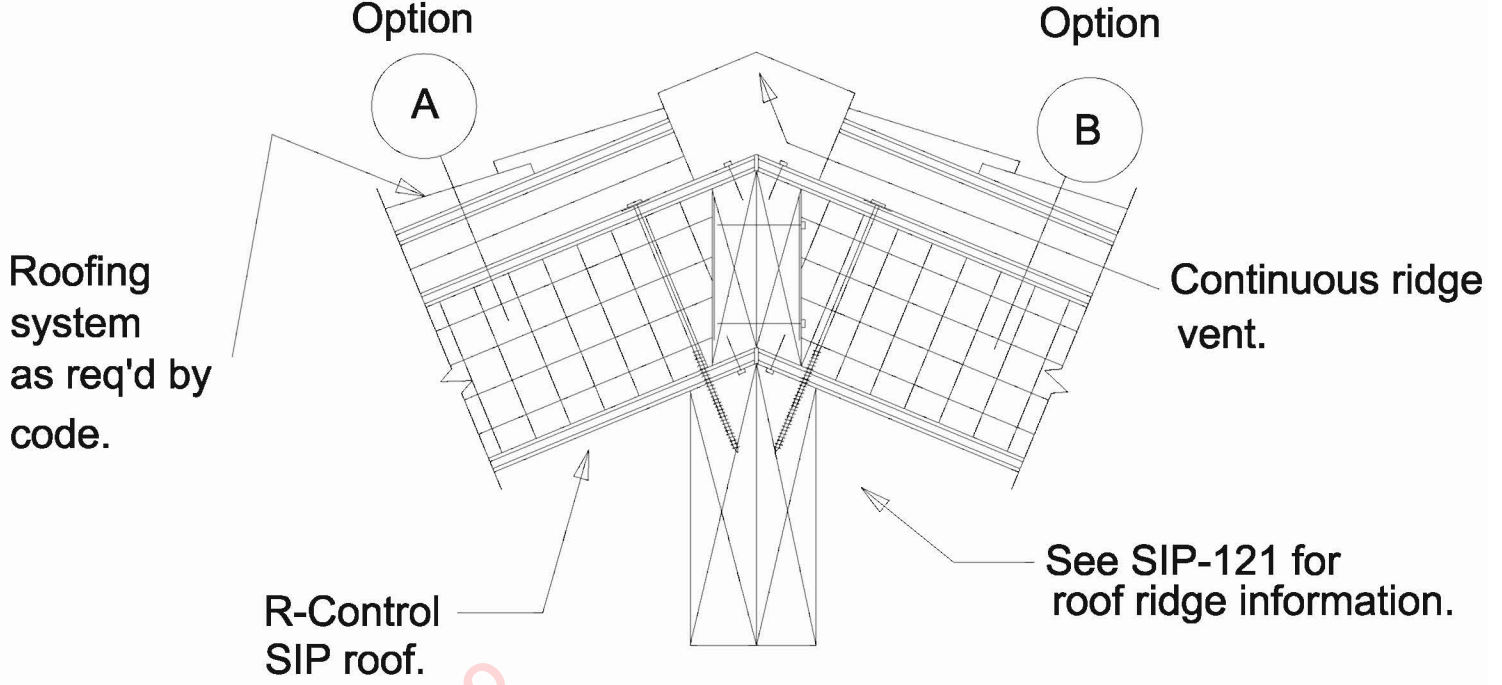


## SECTION A

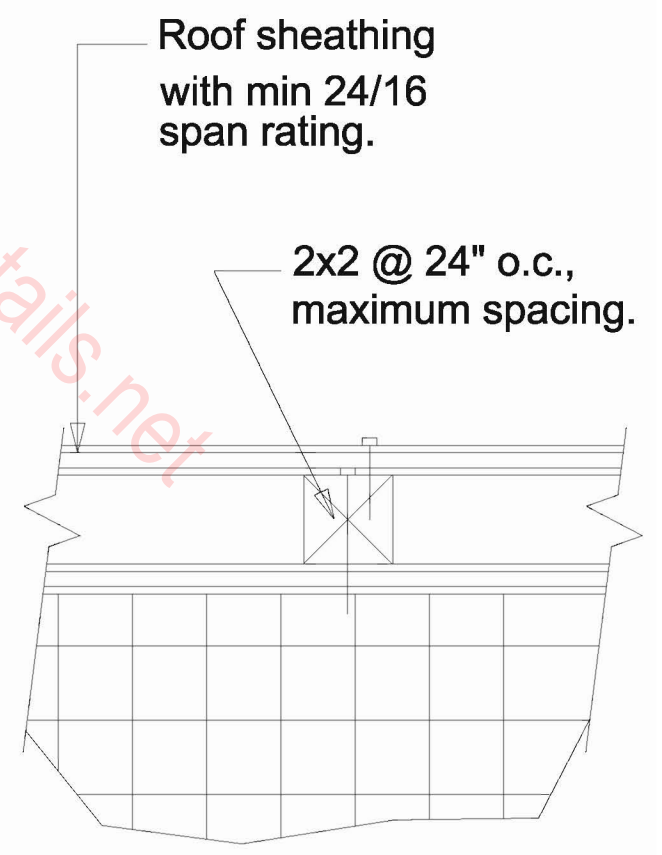
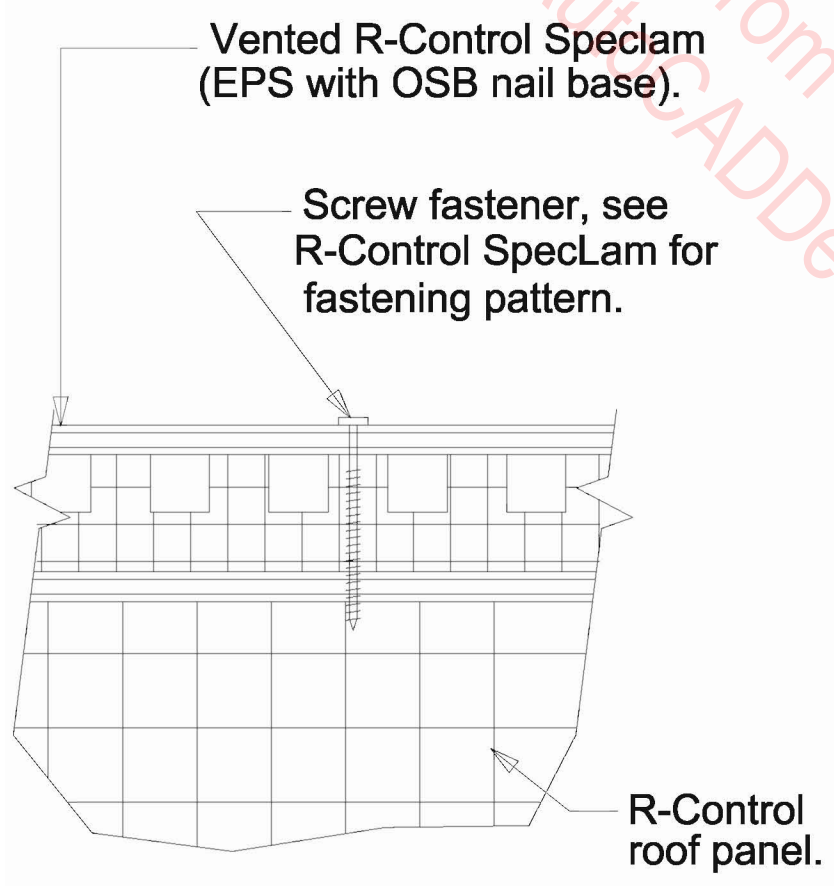


## SECTION B

Cold Roof  
Eave with Vented SpecLam

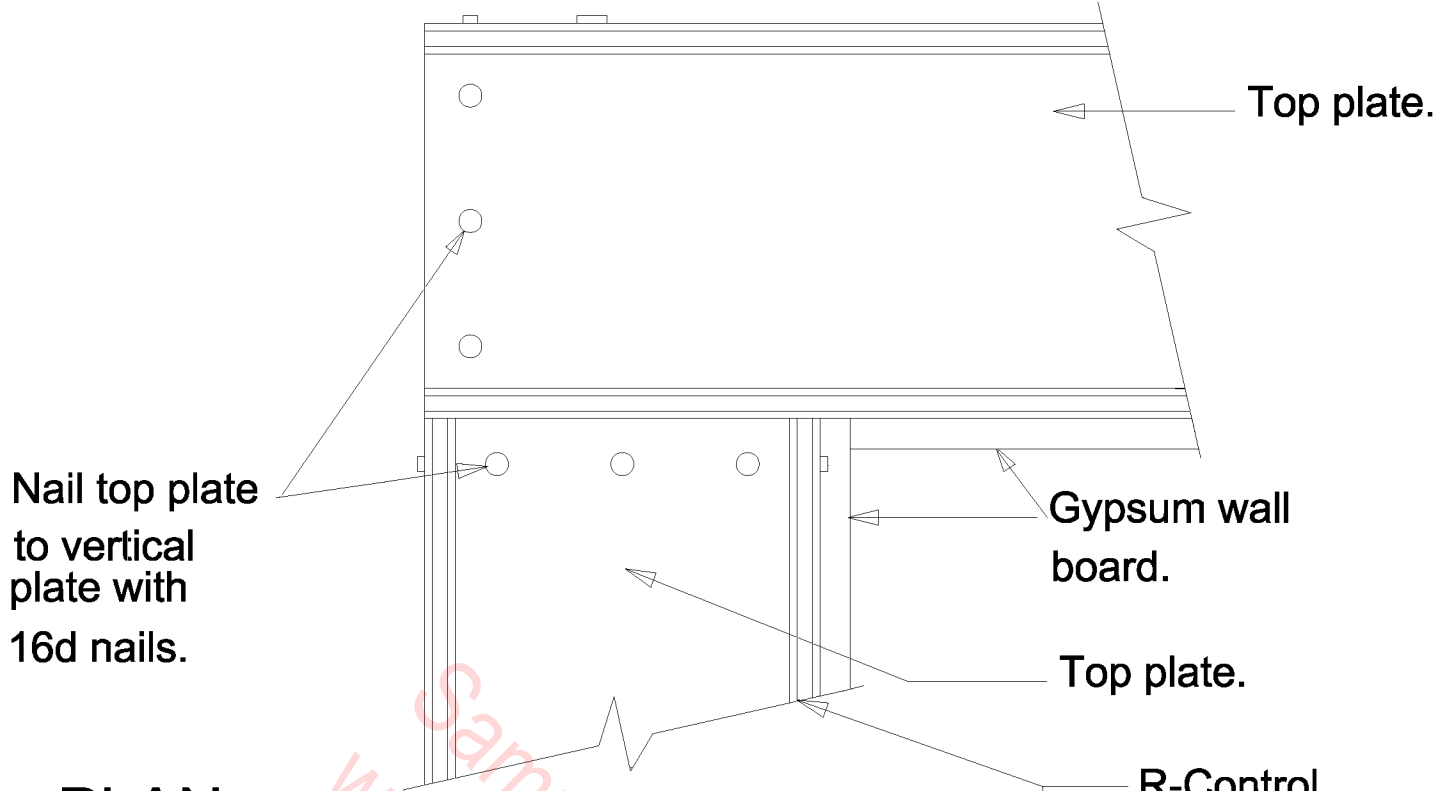


**SECTION**



**SECTION A**

**SECTION B**



**PLAN**

1 1/2" R-Control Screw Fastener @ 24" o.c.

R-Control Do-All-Ply, each side.

R-Control Do-All-Ply continuous.

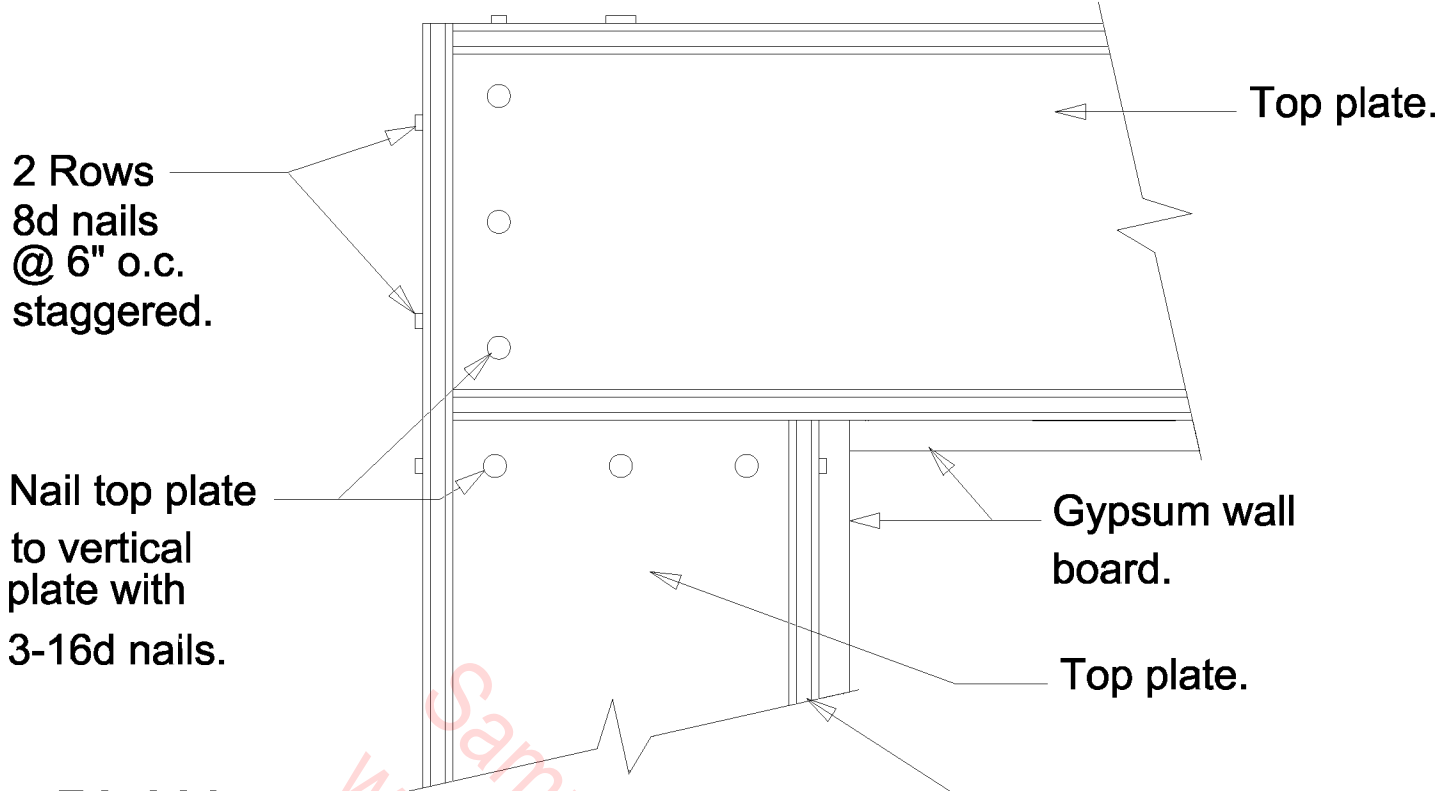
1 1/2"

R-Control Do-All-Ply, each side

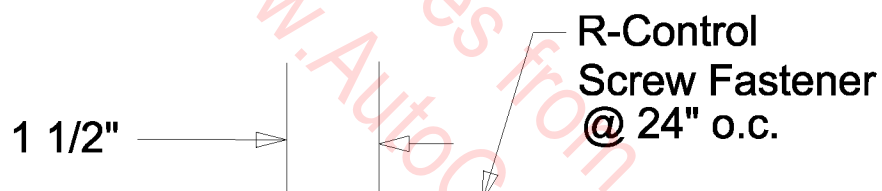
8d Nails or 14 ga. 1 1/2" staples @ 6" o.c. each side or equivalent.

**SECTION**

**Corner Connection**



**PLAN**



R-Control Do-All-Ply,

R-Control Do-All-Ply continuous.

1 1/2"

R-Control Plate & Spline adhesive, each side.

8d Nails or 14 ga. 1 1/2" staples @ 6" o.c. each side or equivalent.

**SECTION**

**Corner Connection**

8d Nails or 14 ga.  
1 1/2" staples @ 6"  
o.c. each side  
or equivalent.

Nail top plate  
to vertical  
plate with

Top plate.

R-Control  
SIP wall.

Top plate.

Spacer  
material or  
gypsum  
wall board  
as req'd.

Timber

Gypsum  
wall board.

## PLAN

1 1/2"

R-Control  
Do-All-Ply  
each side.

1 1/2"

R-Control  
Screw Fastener  
@ 24" o.c. or  
as required.

R-Control  
Screw Fastener  
@ 24" o.c. or

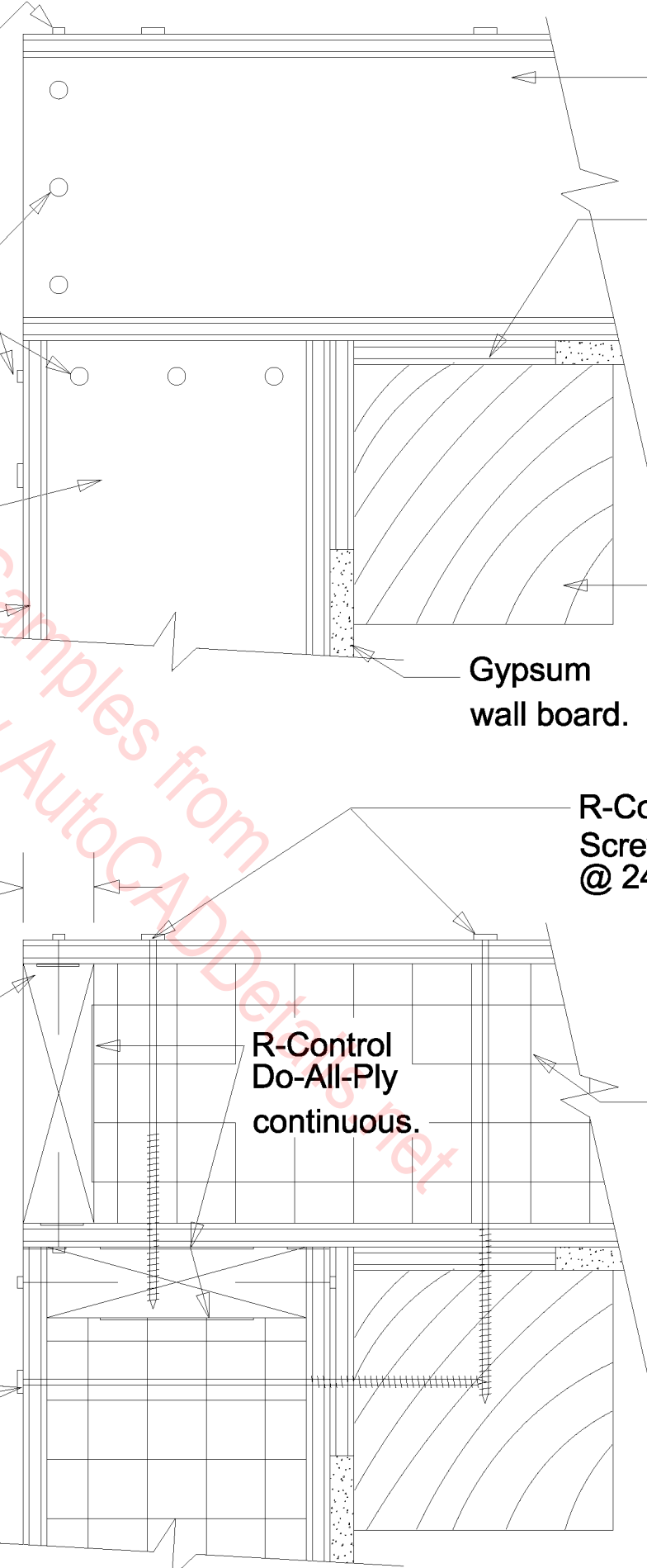
R-Control  
Do-All-Ply  
continuous.

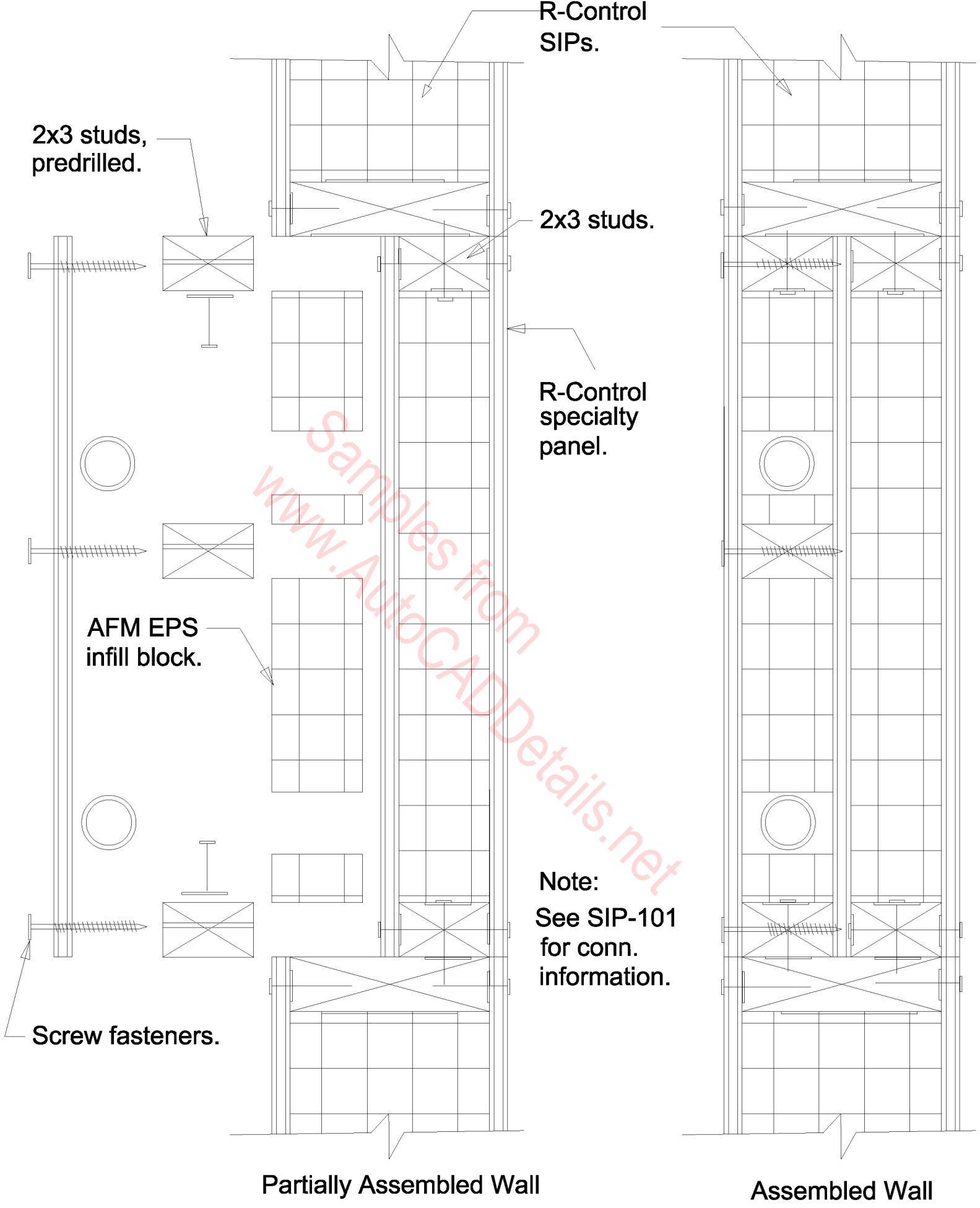
R-Control  
SIP wall.

## SECTION

Corner Connection

www.AutoCADder.com





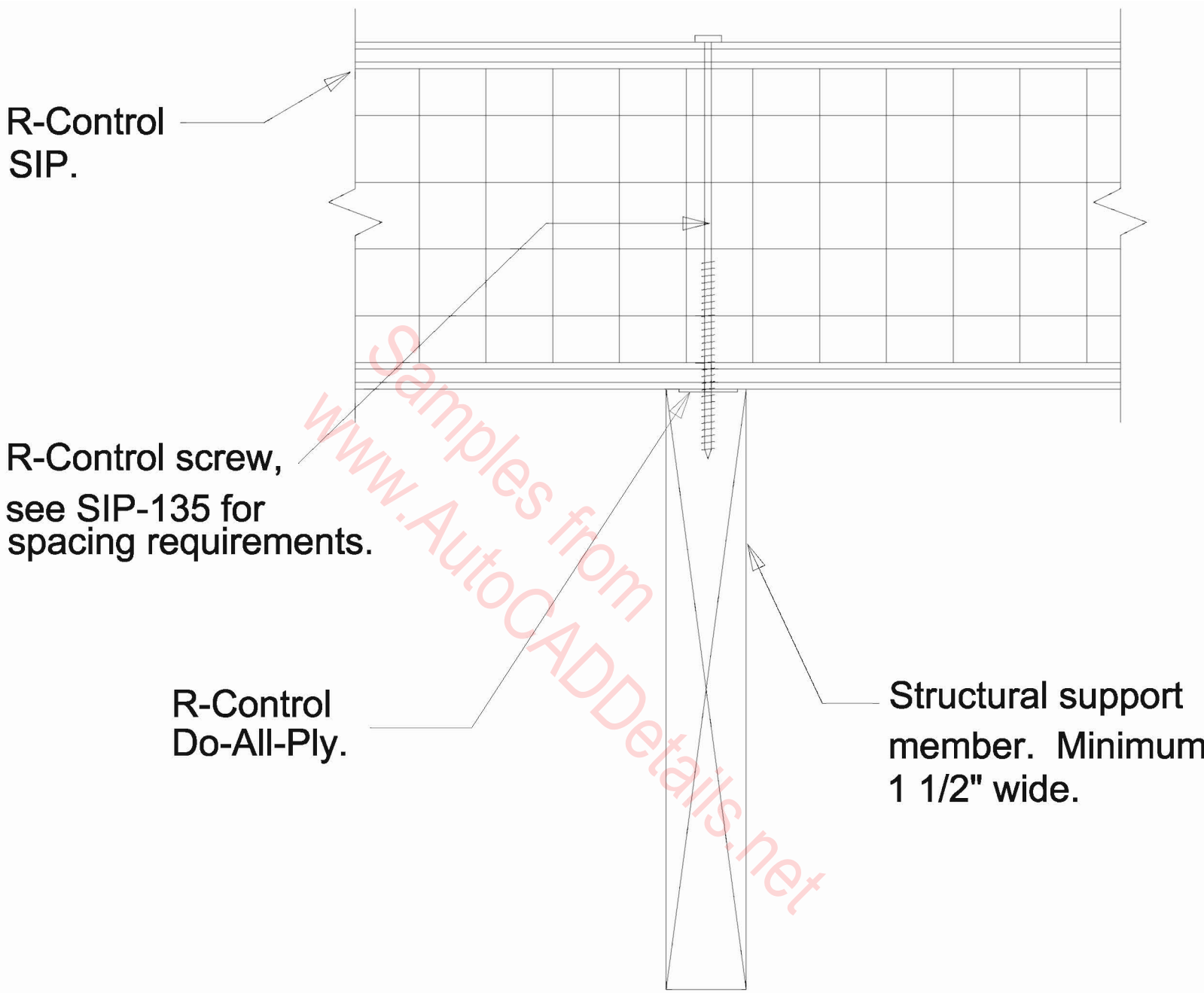
**PLAN**

**Partially Assembled Wall**

**Assembled Wall**

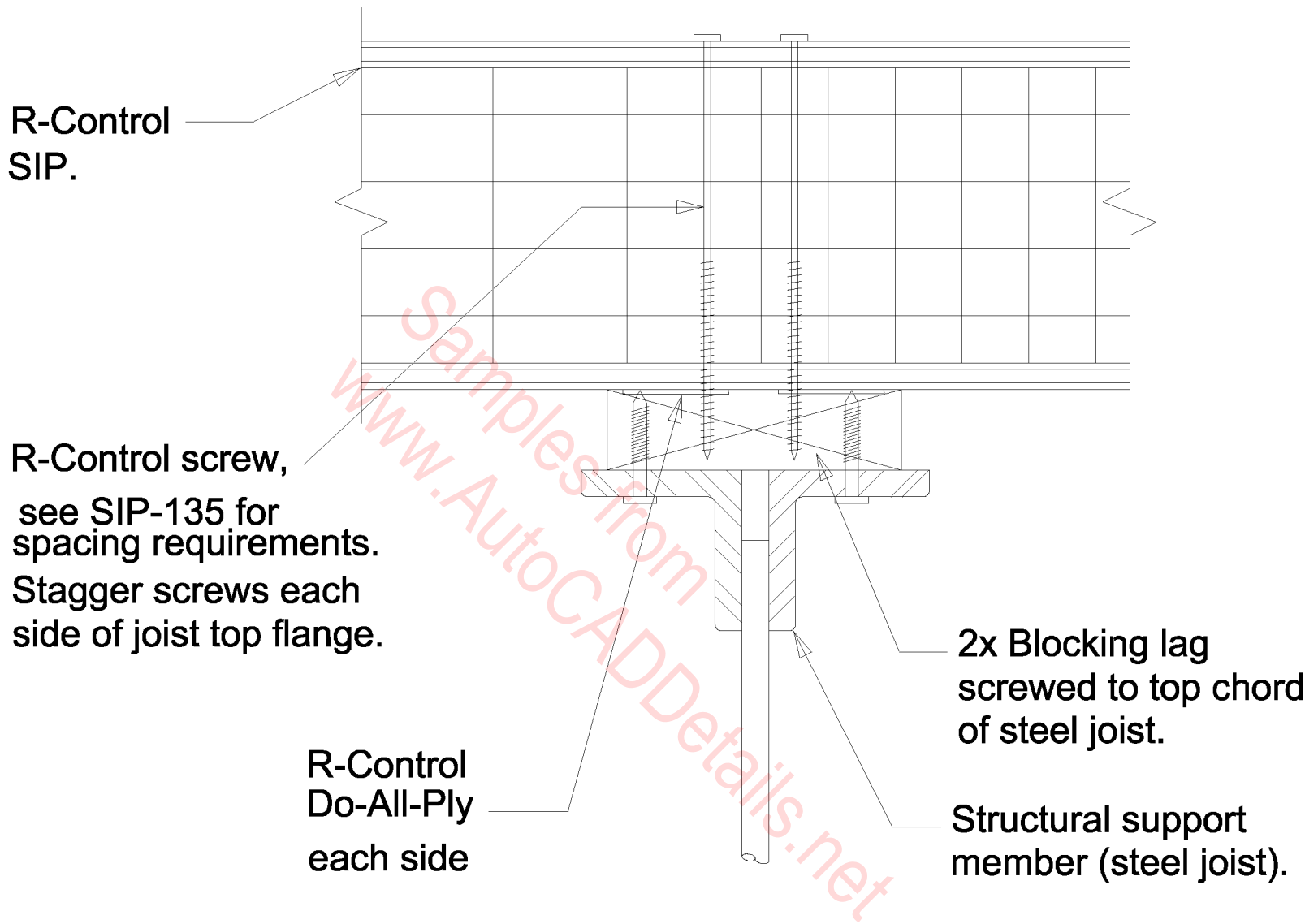
**Commercial Wall Chase**





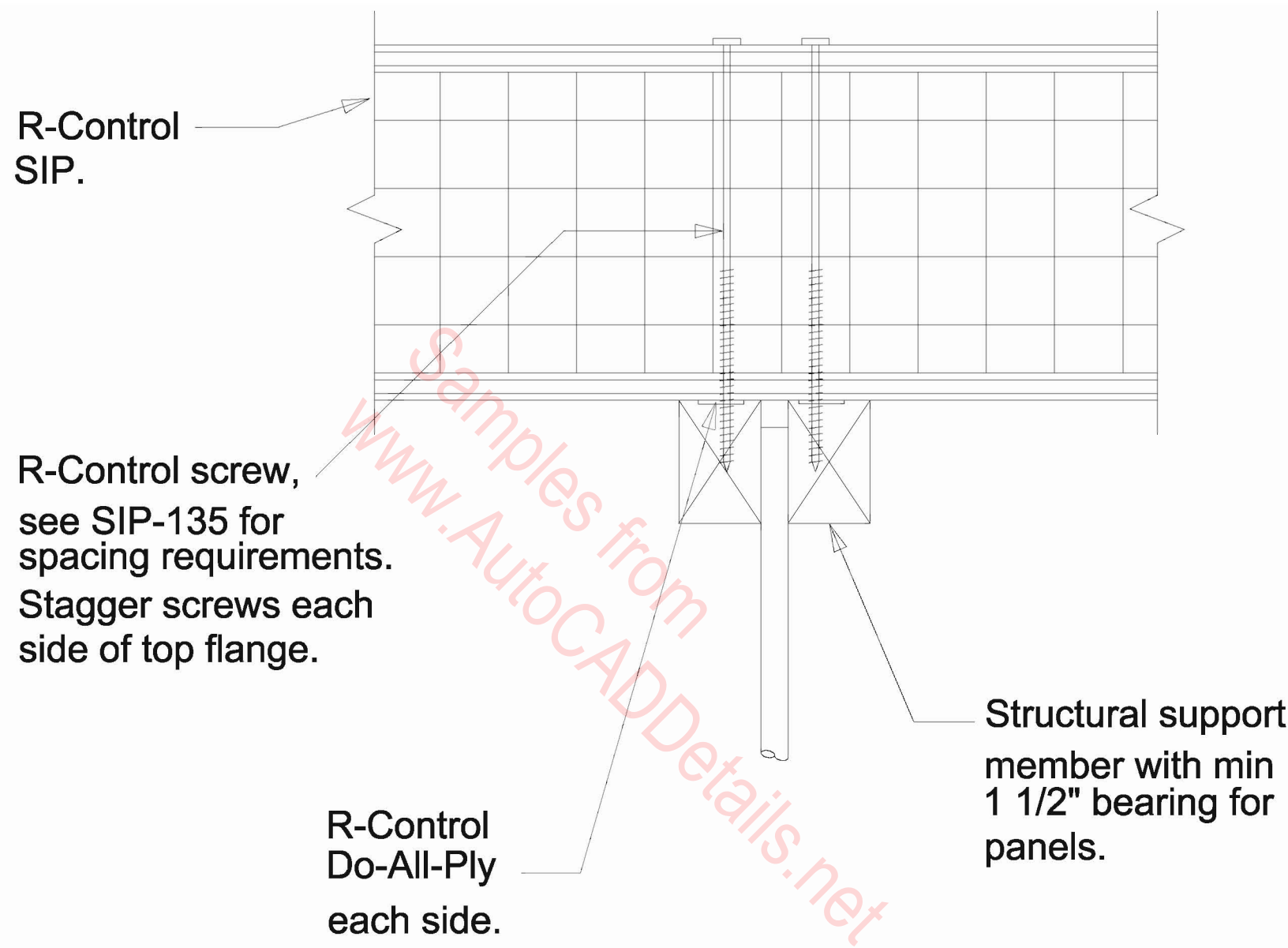
# SECTION

Continuous Panel  
At Dimensional Lumber



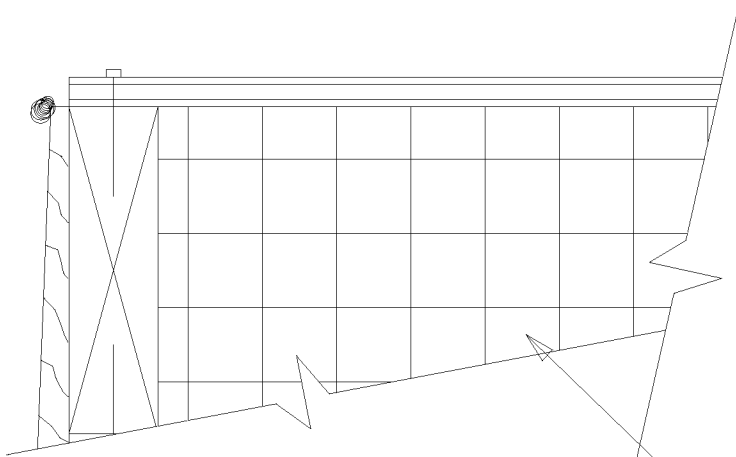
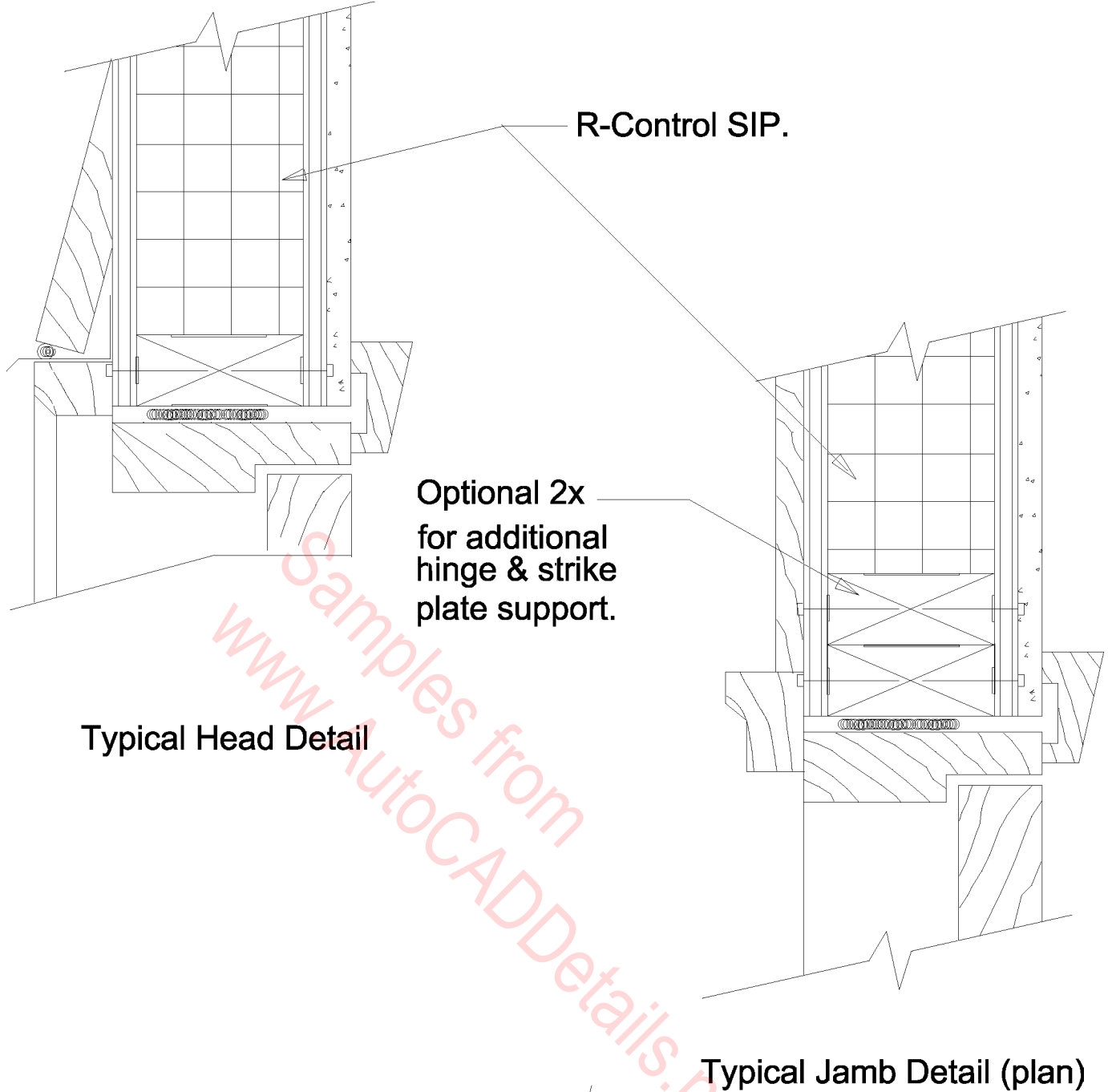
# SECTION

Continuous Panel  
At Steel Joist



# SECTION

Continuous Panel @ Truss



Typical Exterior Sill Detail

Note: Refer to SIP-116  
for notes and detail  
information.

# SECTION

## Door Detail

Exterior finish & underlayment as req'd by code.

R-Control Do-All-Ply continuous.

R-Control Do-All-Ply, each side.

Field installed panel bottom plate.

Subfloor

R-Control Do-All-Ply.

Nail as req'd by code.

Rim joist.

For connection information, sealant, and adhesive, see wall above.

R-Control SIP wall.

Gypsum wall board.

16d Nails into floor joist as req'd by code.

8d Nails or 14 ga. 1 1/2" staples @ 6" o.c. each side or equivalent.

Floor joist.

EPS insulation plug

Nail as req'd.

Spacer board (optional) where required for standard 8' drywall application.

## SECTION

Bearing on Wall Panel

Continuous R-Control SIP wall.

Exterior finish & underlayment as req'd by code.

Gypsum wall board.

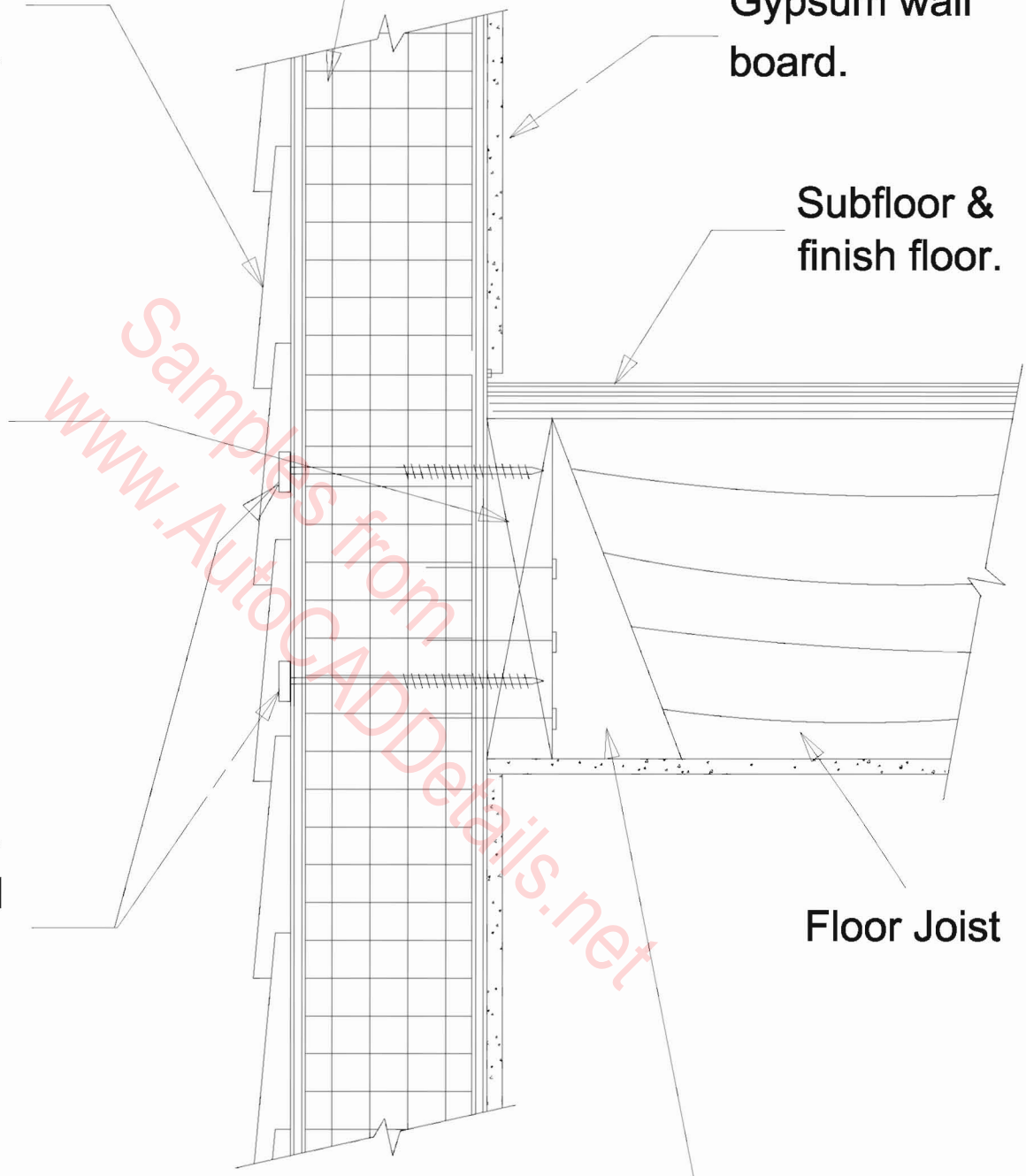
Subfloor & finish floor.

Ledger beam as req'd by specific design.

R-Control Screw Fastener spaced as req'd by specific design.

Floor Joist

Joist hamger nail as req'd.



Floor Joist Hanger and Ledger Beam



Exterior finish & underlayment as req'd by code.

See SIP-101 for connection information.

R-Control Screw Fastener @ 24" o.c.

R-Control Screw Fastener spaced as req'd by specific design.

Continuous R-Control SIP wall.

Gypsum wall board.

Finished floor min. 7/16"

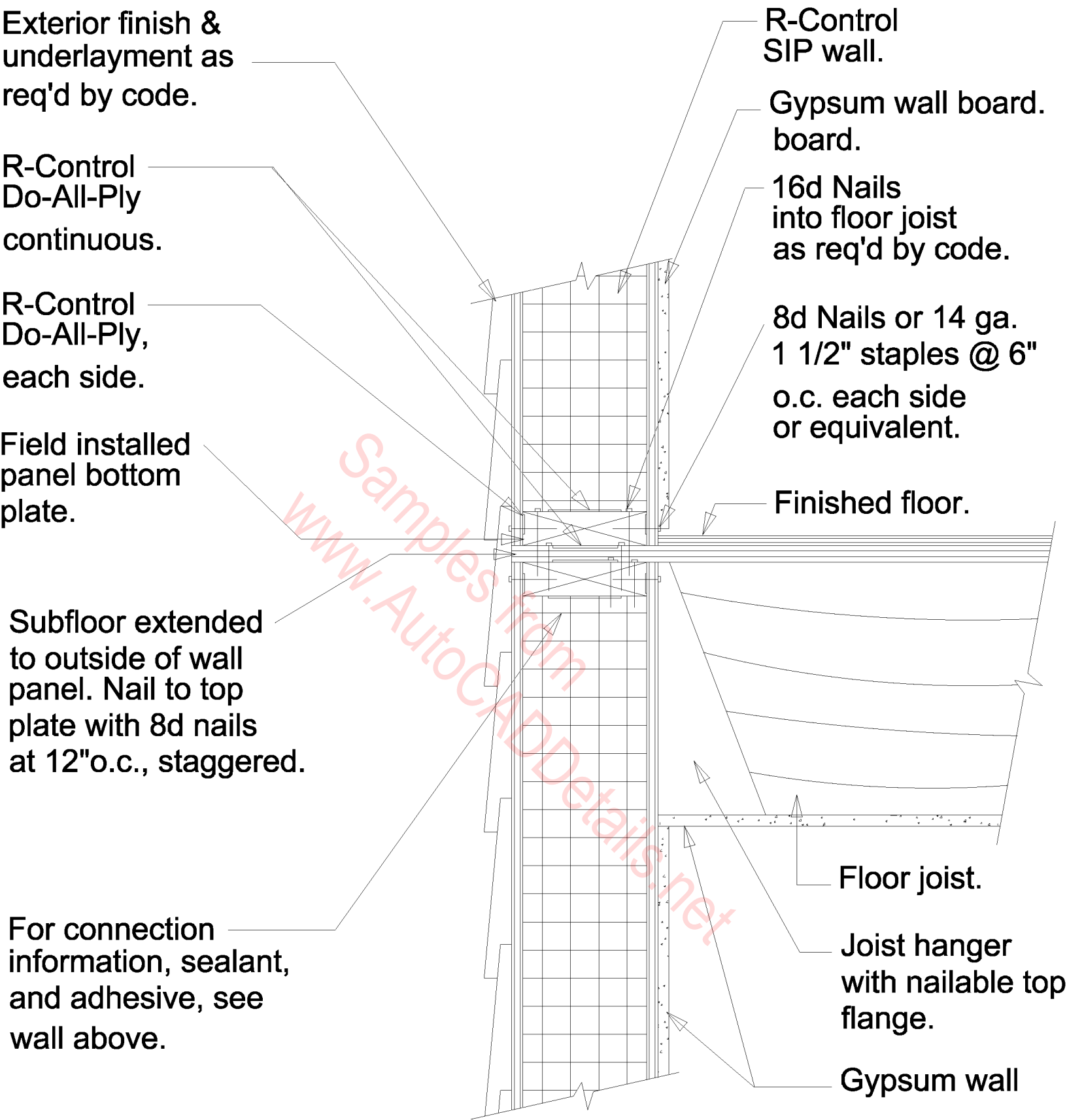
R-Control SIP floor.

Ledger beam as req'd by specific design.

Sampled from  
www.AutoCADDetails.net

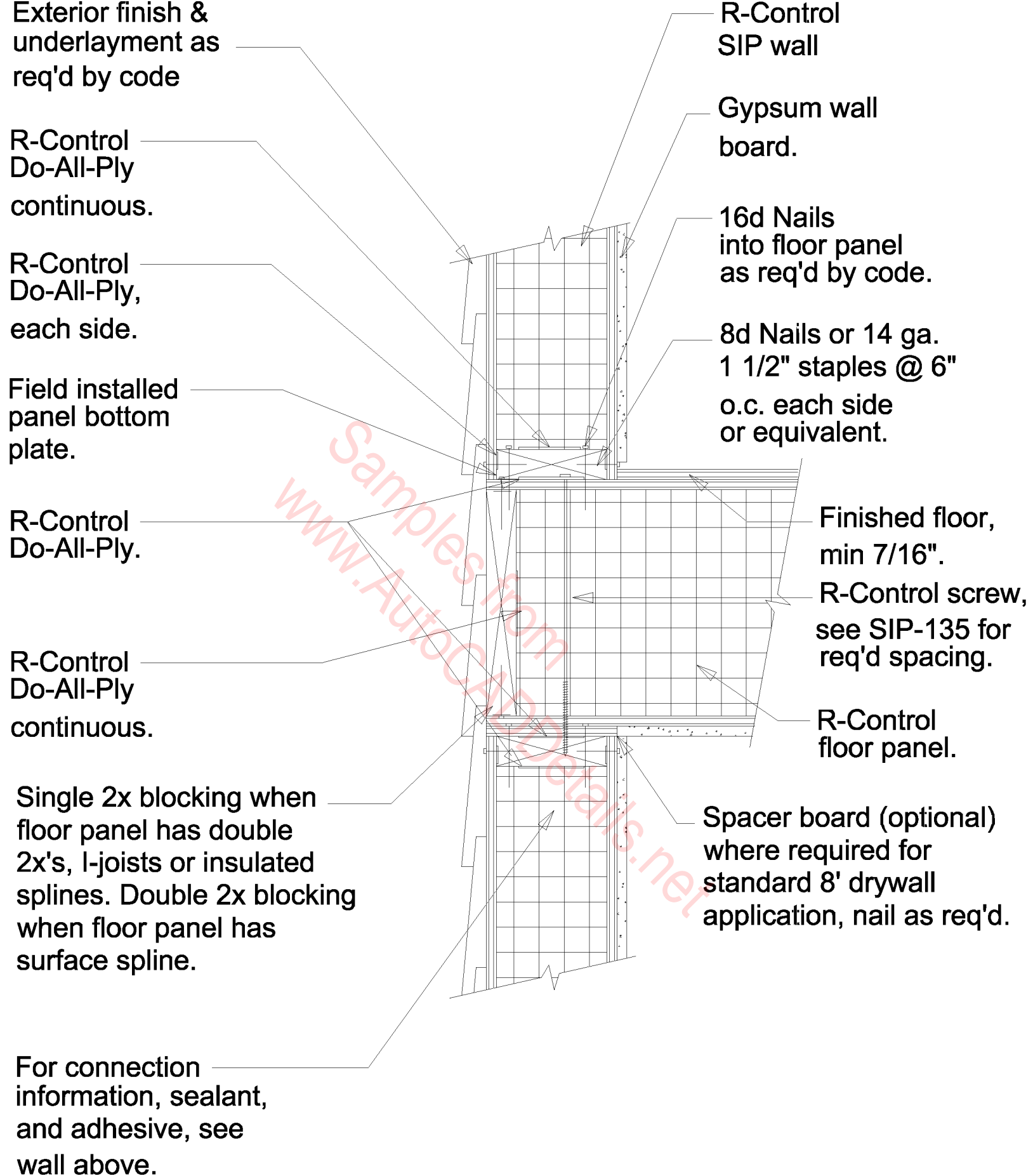
# SECTION

Floor Joist Hanger and Ledger Beam



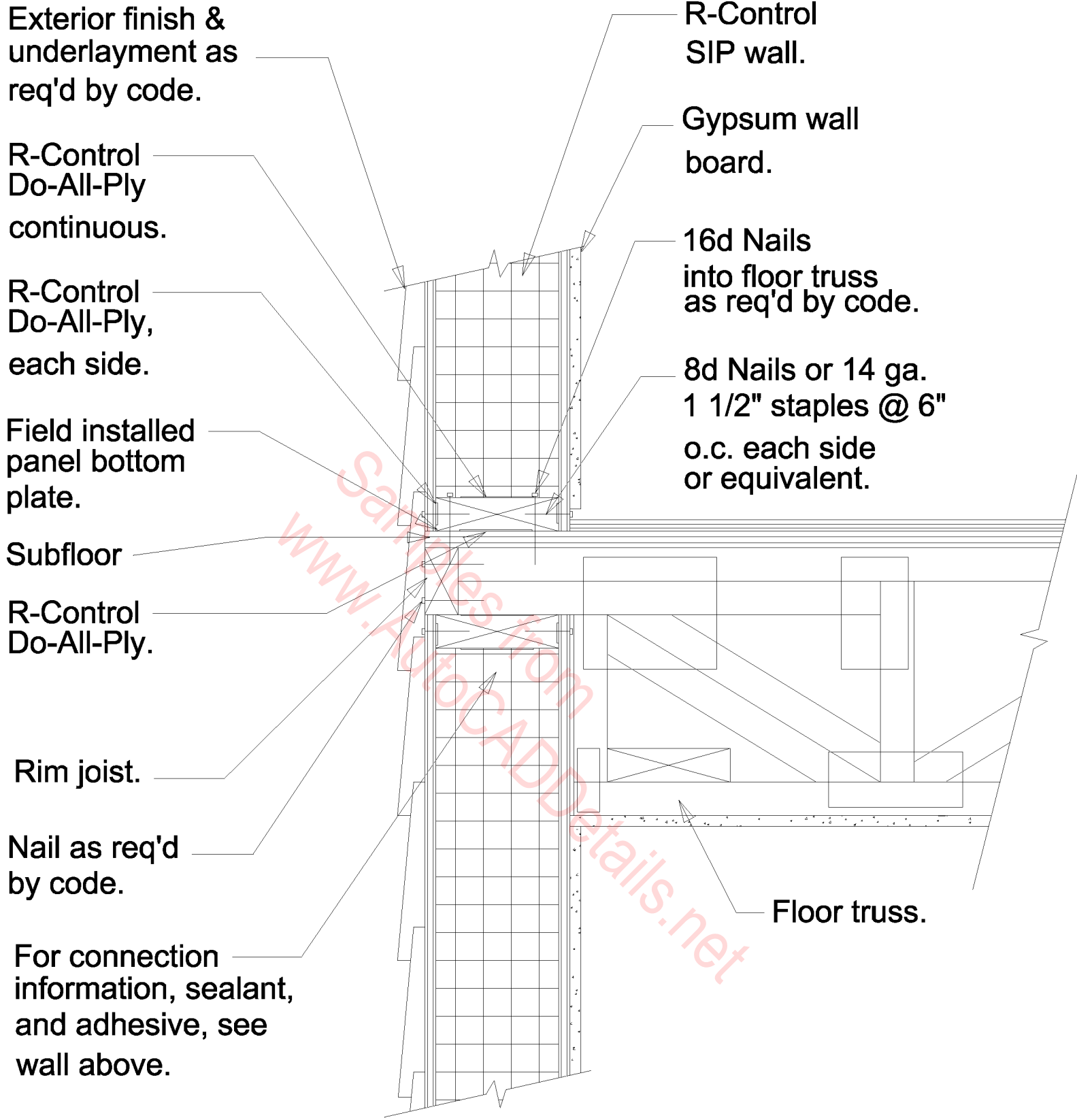
# SECTION

Floor Joist Hanger and Wall Panel



## SECTION

Floor Panel on Wall Panel



# SECTION

Floor Truss Bearing on Wall Panel

Building paper  
(i.e., 15# asphalt felt).

Air space, 1/2" min.

Exterior brick  
finish.

R-Control  
Do-All-Ply  
continuous.

R-Control  
Do-All-Ply,  
each side.

8d Nails or 14 ga.  
1 1/2" staples @  
6" o.c. each side  
or equivalent.

Field installed  
panel bottom  
plate

Cementitious  
scratch  
coat

**SECTION**

R-Control  
SIP wall .

Gypsum wall  
board.

Finished floor,  
min 7/16".

R-Control screw  
@ 24" o.c.

16d Nails  
into sill plate  
as req'd.

R-Control screw,  
see SIP-135 for  
spacing req'd.

R-Control  
floor panel

Treated sill plate.

Sill sealer.

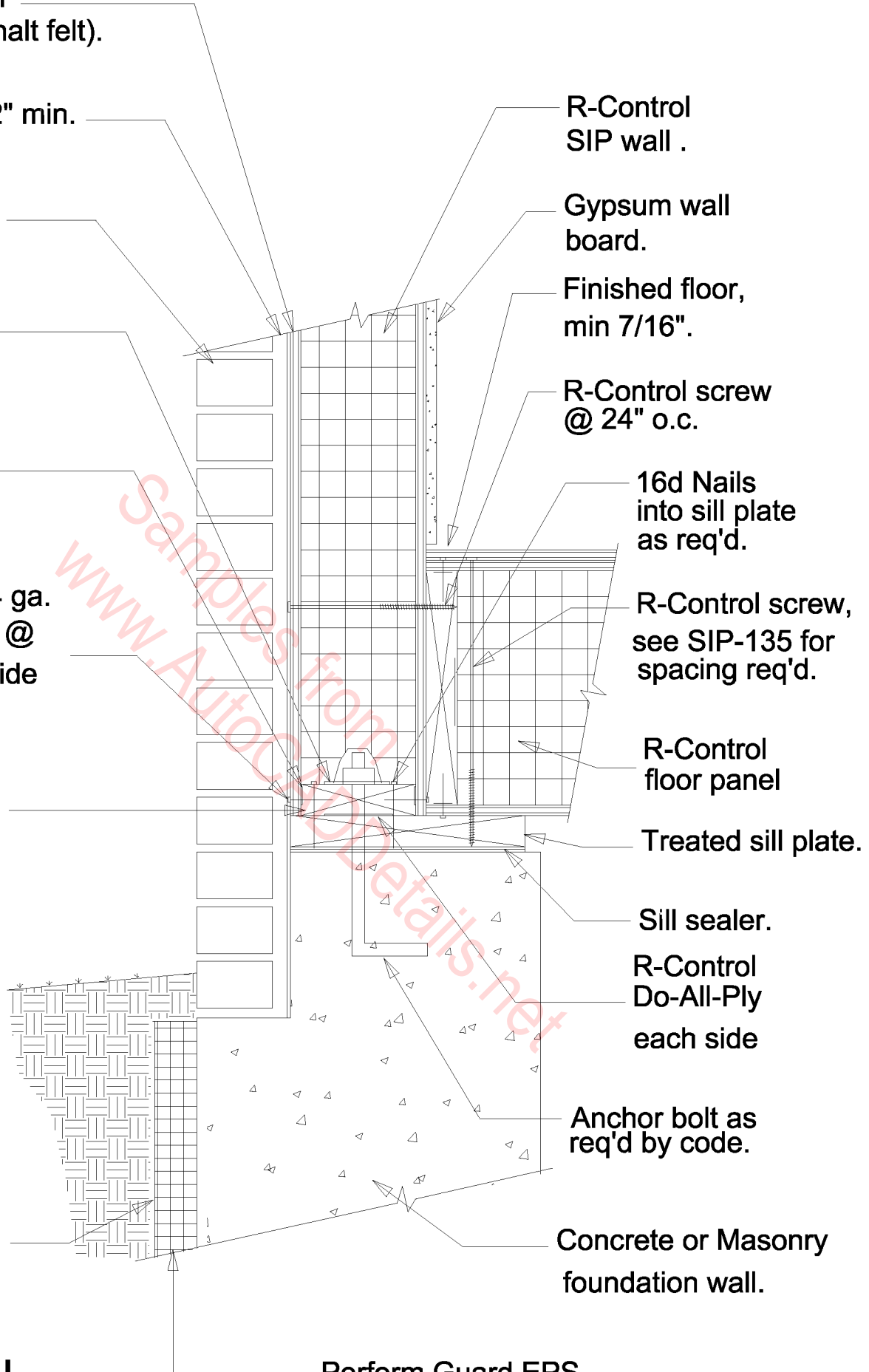
R-Control  
Do-All-Ply  
each side

Anchor bolt as  
req'd by code.

Concrete or Masonry  
foundation wall.

Perform Guard EPS.

Foundation Framing  
Brick Ledge



Exterior finish & underlayment as req'd by code.

R-Control Screw Fastener @ 24" o.c. or as required.

R-Control Do-All-Ply, ea. side.

8d Nails or 14 ga. 1 1/2" staples @ 6" o.c. each side or equivalent.

Field installed panel bottom plate.

Cementitious scratch coat.

R-Control SIP wall non-load bearing.

Timber frame.

Gypsum wall board.

16d Nails into sill plate as req'd.

Subfloor

Floor joist.

Rim joist.

Nail as req'd by code.

Treated sill plate.

Sill sealer.

R-Control Do-All-Ply, ea. side.

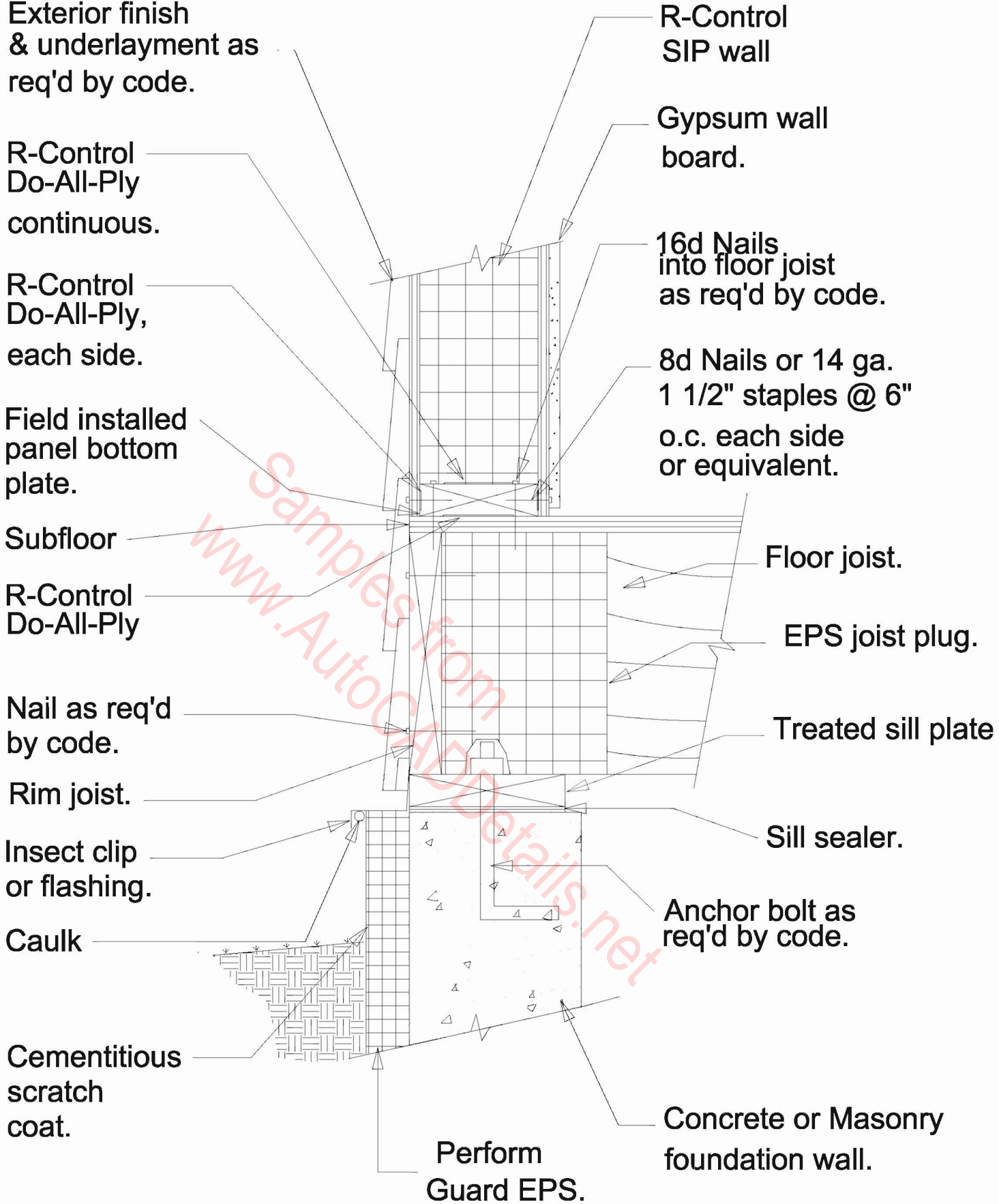
Anchor bolt as req'd by code.

Concrete or Masonry foundation wall.

Perform Guard EPS.

# SECTION

Foundation Framing - Joist



# SECTION

Foundation Framing - Joist

Exterior finish & underlayment as req'd by code.

R-Control Do-All-Ply continuous.

R-Control Do-All-Ply, each side.

8d Nails or 14 ga. 1 1/2" staples @ 6" o.c. each side or equivalent.

Field installed panel bottom plate.

Insect clip or flashing.

Caulk

Cementitious scratch coat.

R-Control SIP wall

Gypsum wall board.

16d Nails into sill plate as req'd.

Subfloor

Floor joist.

Rim joist.

Nail as req'd by code.

Treated sill plate.

Sill sealer.

R-Control Do-All-Ply, each side.

Anchor bolt as req'd by code.

Concrete or Masonry foundation wall.

Perform Guard EPS.

SECTION

Foundation Framing - Joist



Exterior finish & underlayment as req'd by code.

R-Control Do-All-Ply continuous.

R-Control Do-All-Ply, each side.

8d Nails or 14 ga. 1 1/2" staples @ 6" o.c. each side or equivalent.

Field installed panel bottom plate.

Insect clip or flashing.

Caulk

Cementitious scratch coat.

R-Control SIP wall.

Gypsum wall board.

Finished floor, min 7/16".

R-Control screw @ 24" o.c.

16d Nails into sill plate as req'd.

R-Control screw, see SIP-135 for spacing req'd.

R-Control Panel

Treated sill plate.

Sill sealer.

R-Control Do-All-Ply, each side.

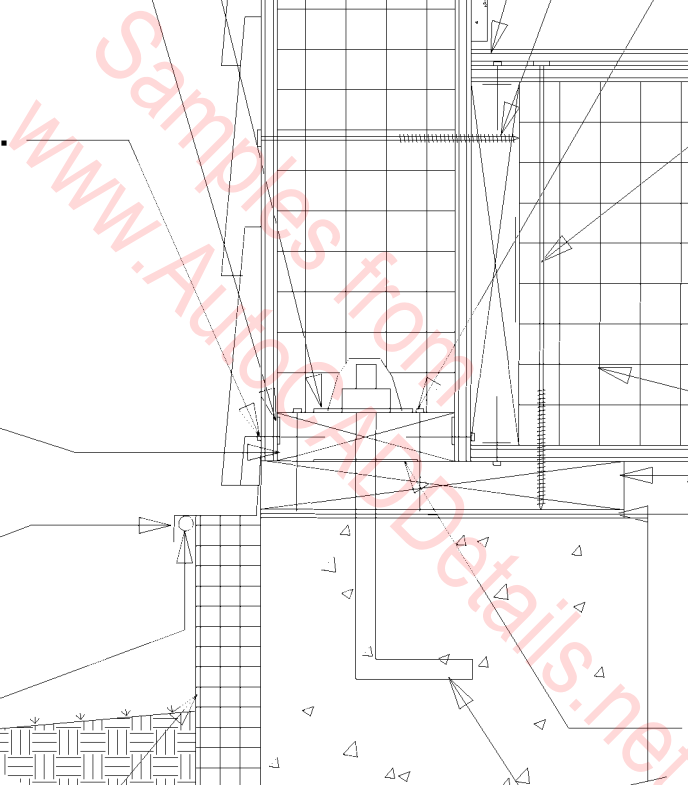
Anchor bolt as req'd by code.

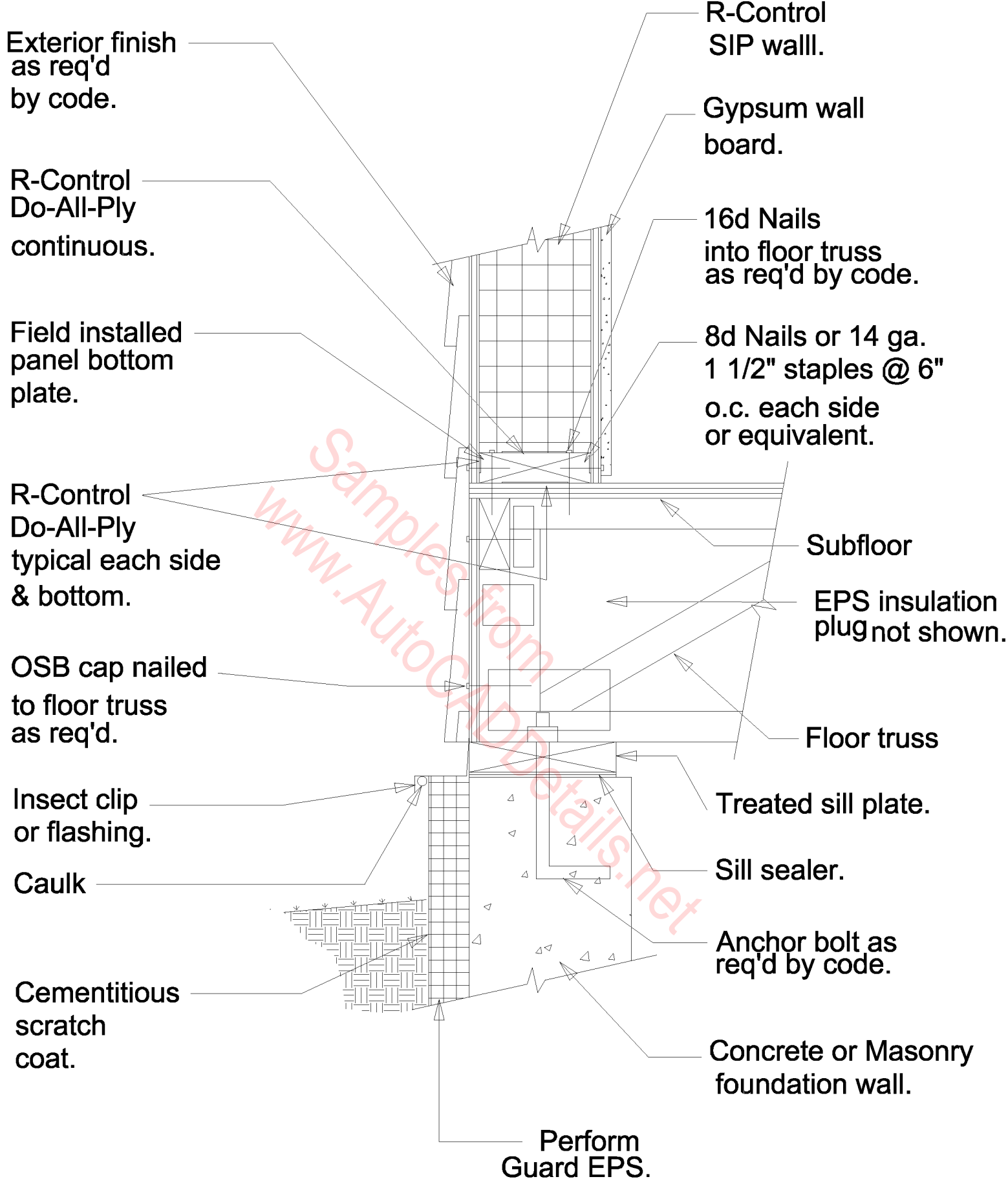
Concrete or Masonry foundation wall.

Perform Guard EPS.

# SECTION

## Foundation Framing - Panel



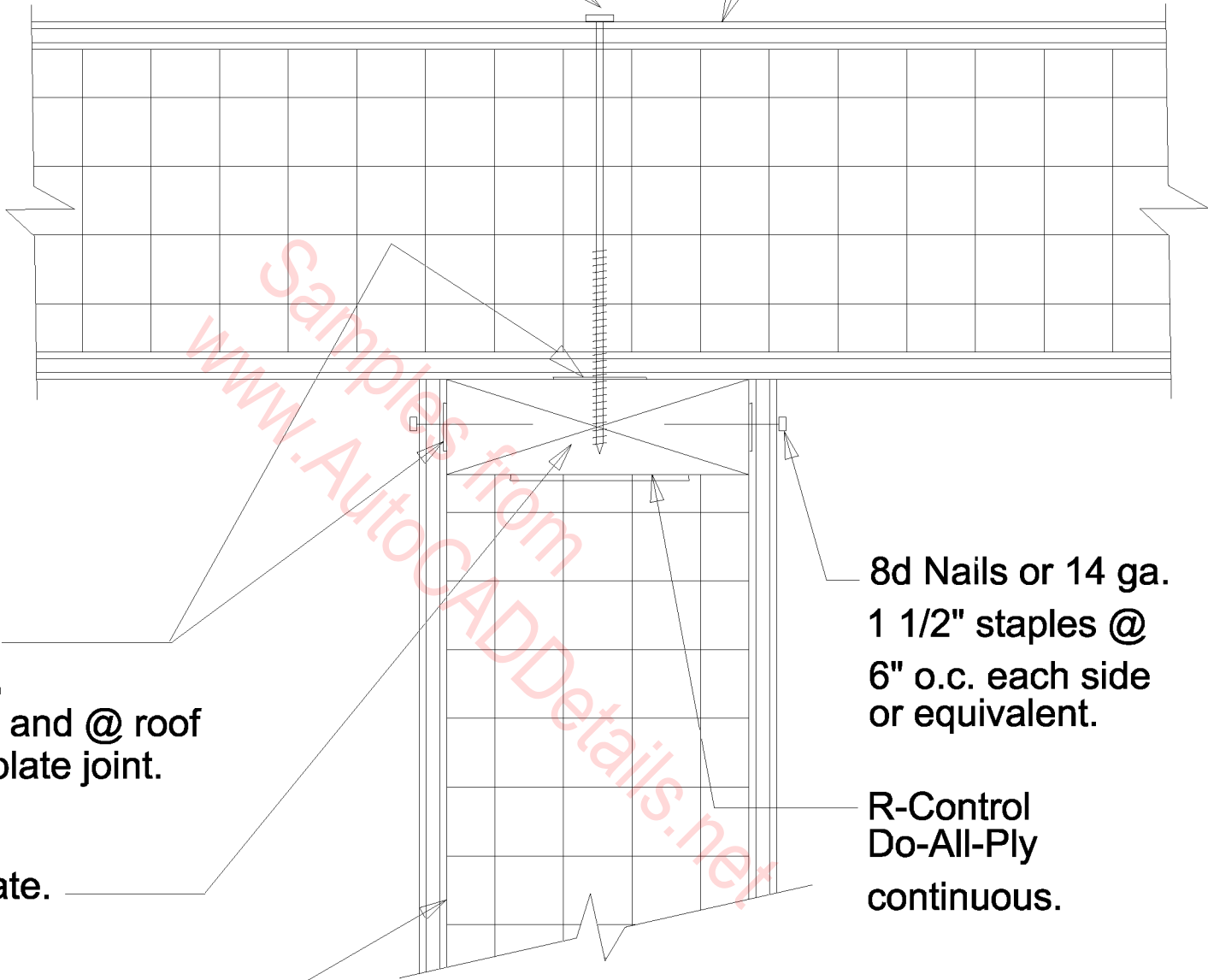


# SECTION

Foundation Framing - Truss

R-Control screw,  
see SIP-135 for  
spacing requirements.

R-Control  
SIP roof.



R-Control  
Do-All-Ply,  
each side, and @ roof  
panel/top plate joint.

8d Nails or 14 ga.  
1 1/2" staples @  
6" o.c. each side  
or equivalent.

2x top plate.

R-Control  
Do-All-Ply  
continuous.

R-Control  
SIP wall.

## SECTION

Gable End

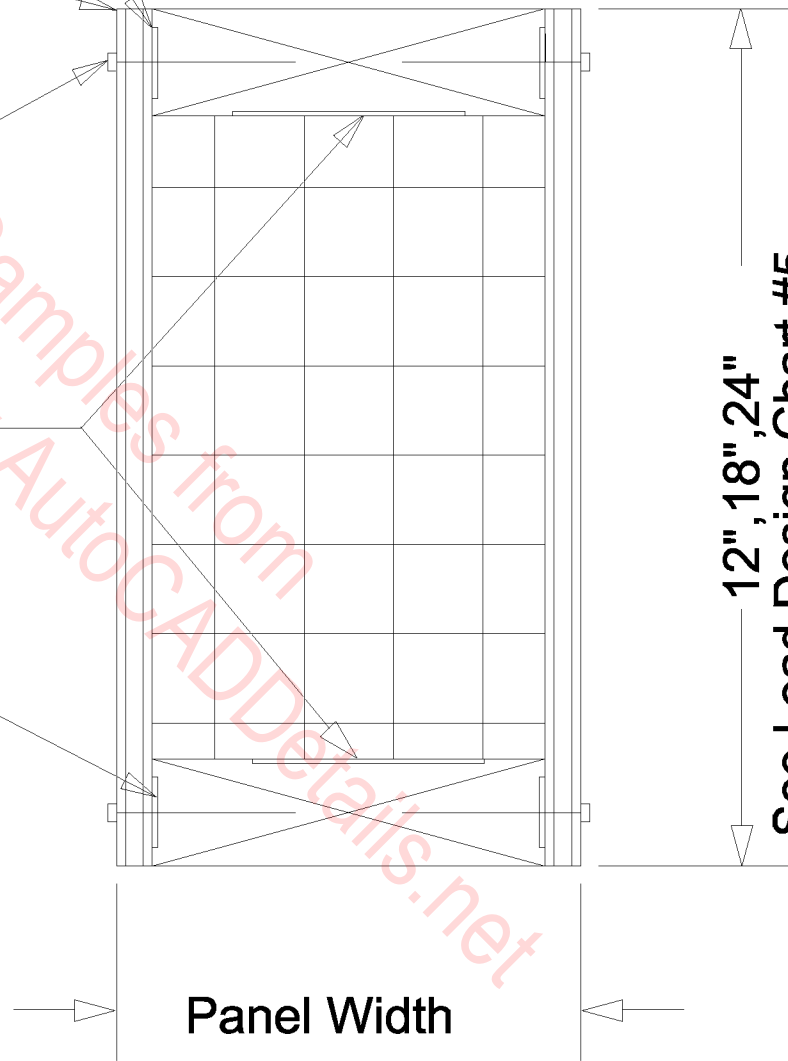
R-Control  
Do-All-Ply,  
each side.

R-Control SIP  
used as header.

8d Nails or 14 ga.  
1 1/2" staples @ 6"  
o.c. each side, top &  
bottom or equivalent.

R-Control Do-All-Ply  
continuous sealant.

R-Control  
Do-All-Ply  
typical each side,  
top & bottom.



12" , 18" , 24"  
See Load Design Chart #5  
for allowable depths,  
spans & capacities of  
R-Control SIP used  
as a header

# SECTION

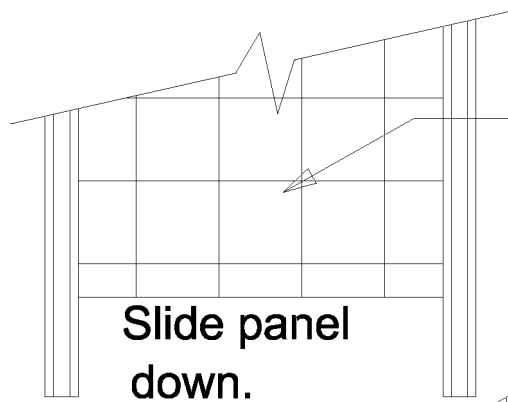
Header sections  
(R-Control Panel)

**NOTE:**  
See SIP-101 for  
connection information  
not shown.

R-Control  
Do-All-Ply,  
continuous.

EPS as  
req'd.

R-Control Insulated  
Header.



R-Control SIP  
used as infill.

2x with two rows 10d  
nails @ 12" o.c.,  
staggered.

2x ripped to width  
of header plus OSB  
cap pieces.

OSB cap, match  
thickness with  
panel skins. Typical  
each side of header.

8d Nails @ 12" o.c.  
Typical top & bottom,  
each side.

Panel Width

# SECTION

Header sections  
(Insulated Header)

**NOTE:**

See SIP-101 for connection information not shown.

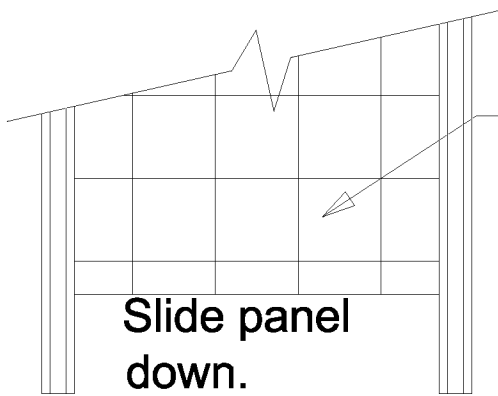
R-Control Do-All-Ply, continuous.

R-Control Do-All-Ply

EPS as req'd.

Built up 2x header.

R-Control Do-All-Ply typical each side, top & bottom.



R-Control SIP used as infill.

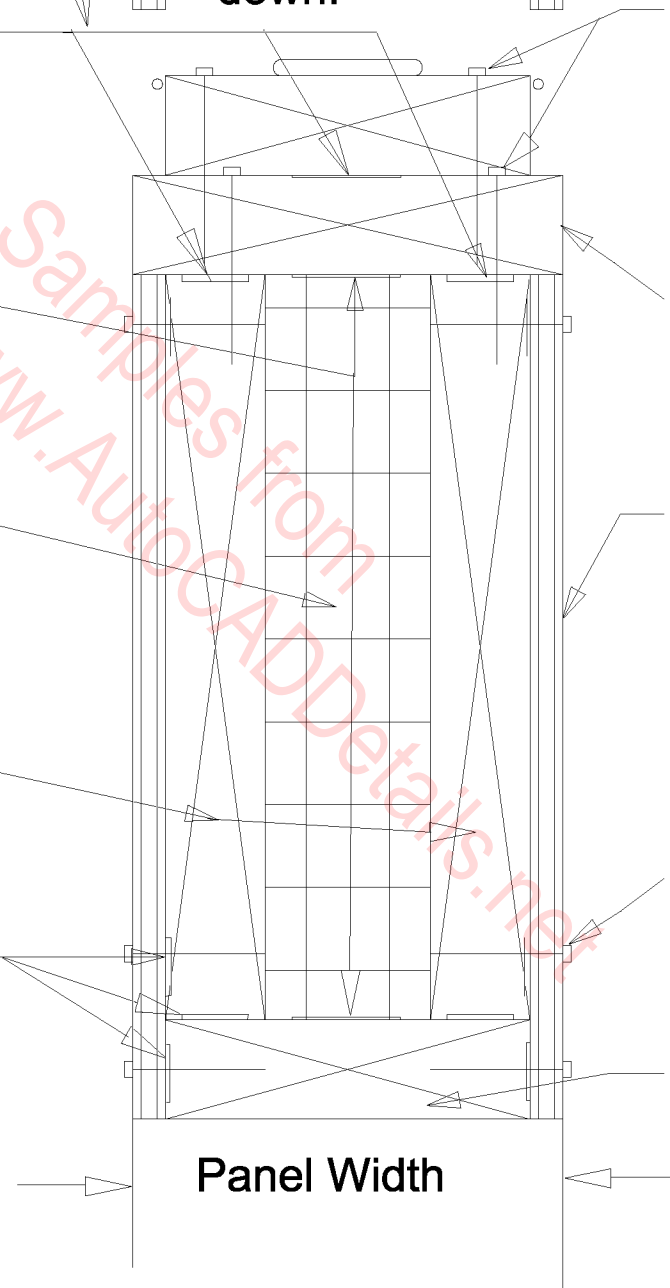
2x with two rows 10d nails @ 12" o.c., staggered.

2x ripped to same width as header plus OSB cap pieces.

OSB cap, match thickness with panel skins. Typical each side of header.

8d Nails @ 12" o.c. Typical top & bottom, each side.

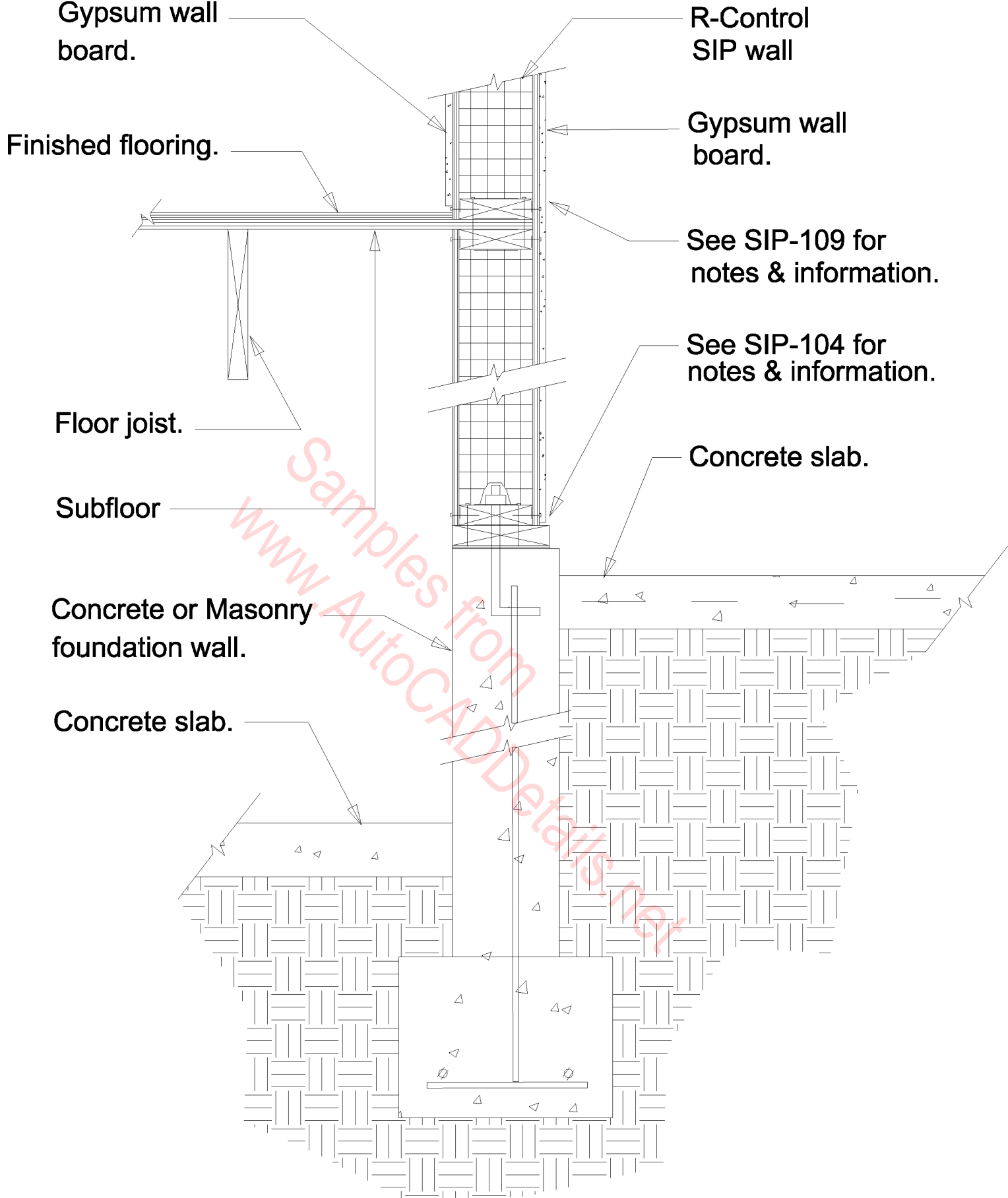
2x window trimmer.



Panel Width

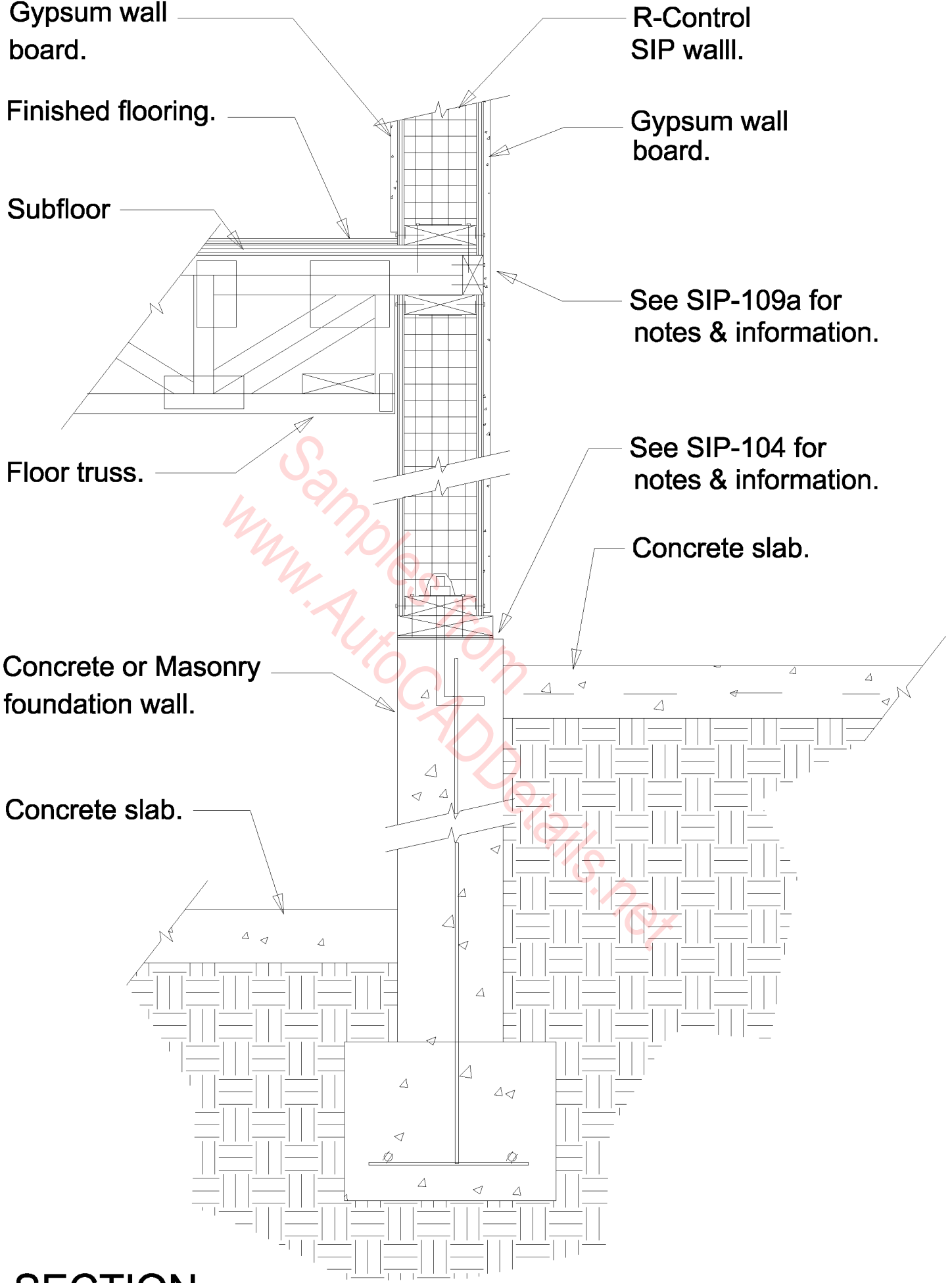
**SECTION**

Header sections  
(Built Up 2x's)



**SECTION**

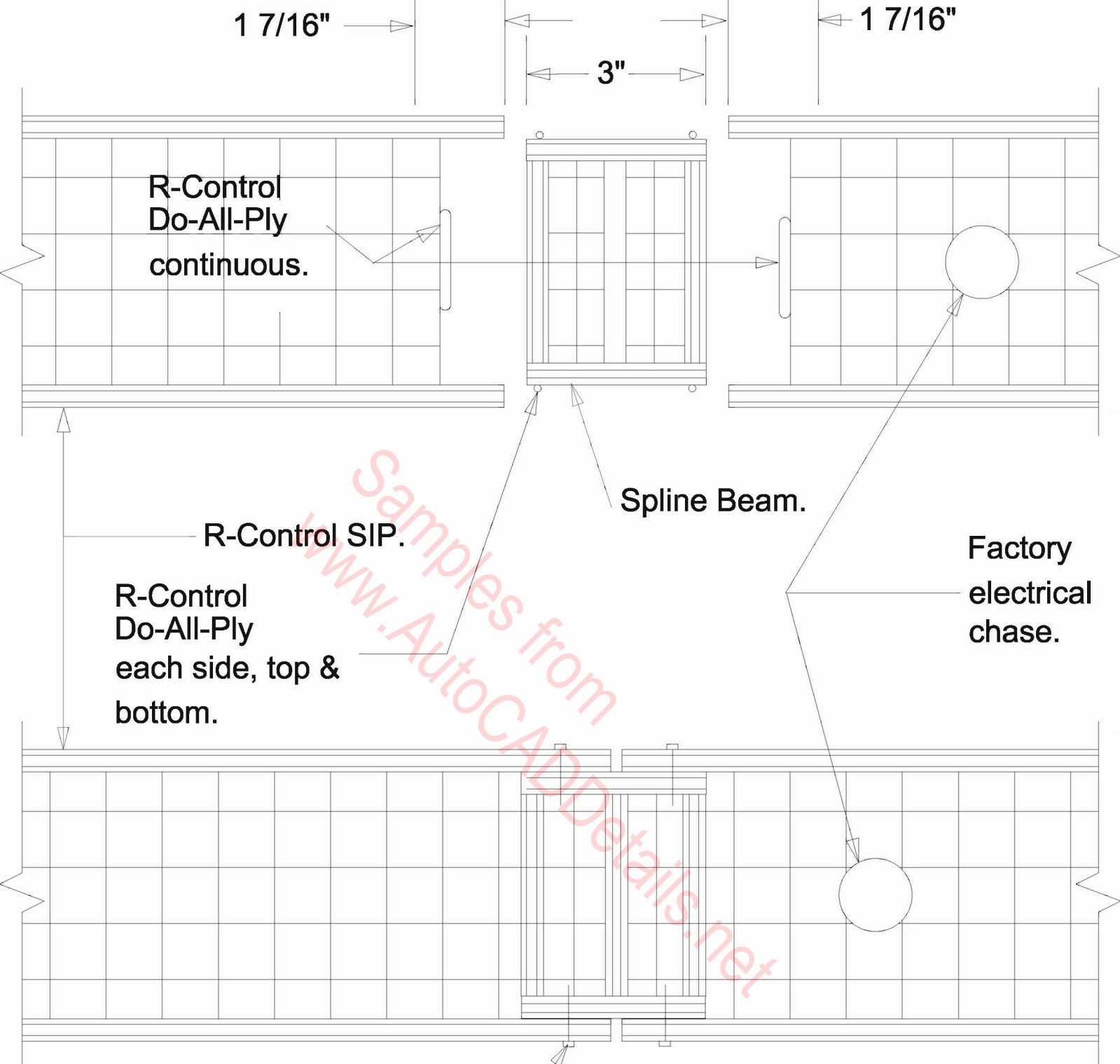
**Knee Wall Framing**



**SECTION**

**Knee Wall Framing**



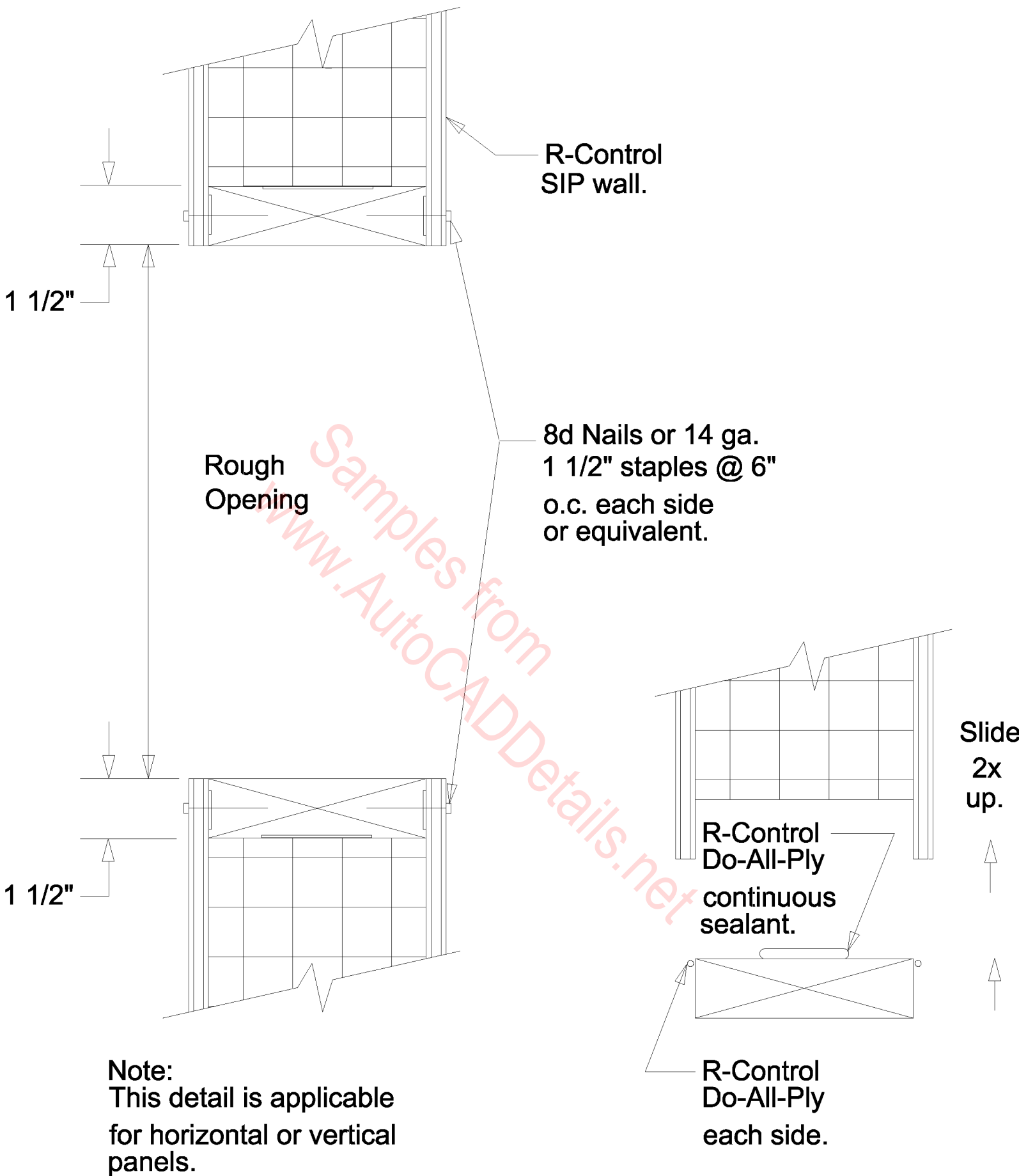


Fasten with 8d nails or 14ga. 1 1/2" staples @ 6" o.c. both sides of panel joint or equivalent. Typical each side of panel.

Note: Vapor retarder recommended on interior of panel when mandated by code or climatic conditions.

**SECTION/PLAN**

Mega Spline Connection



# SECTION

Openings in Panels

# Case 1: Panels up to 16' long.

SIP's 16' or less in length require 4 R-Control screws per support for one & two span conditions. (See Diags 1 & 2)



Diagram 1: Single span condition  
(2 points of attachment)

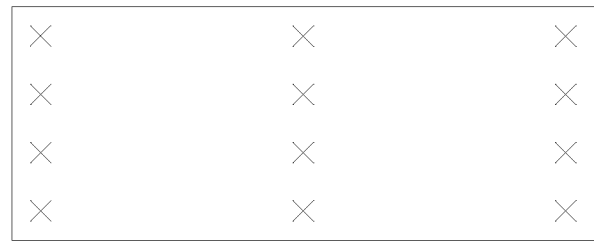


Diagram 2: Two span condition  
(3 points of attachment)

# Case 2: Panels 16'-24' long.

SIP's greater than 16' in length require 6 R-Control screws per support for one & two span conditions. (See Diags 3 & 4)



Diagram 3: Single span condition  
(2 points of attachment)

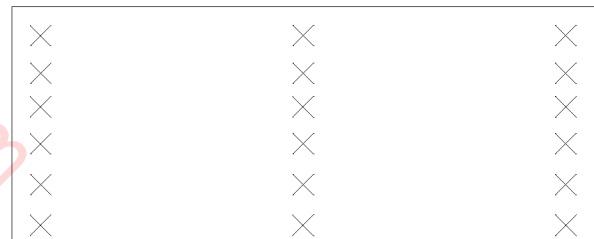


Diagram 4: Two span condition  
(3 points of attachment)

# Case 3: Panels with 3 or more spans.

SIP's any length with 3 or more spans require 4 R-Control screws per support. (See Diag 5)

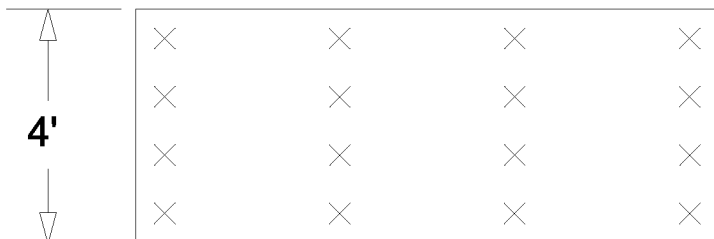


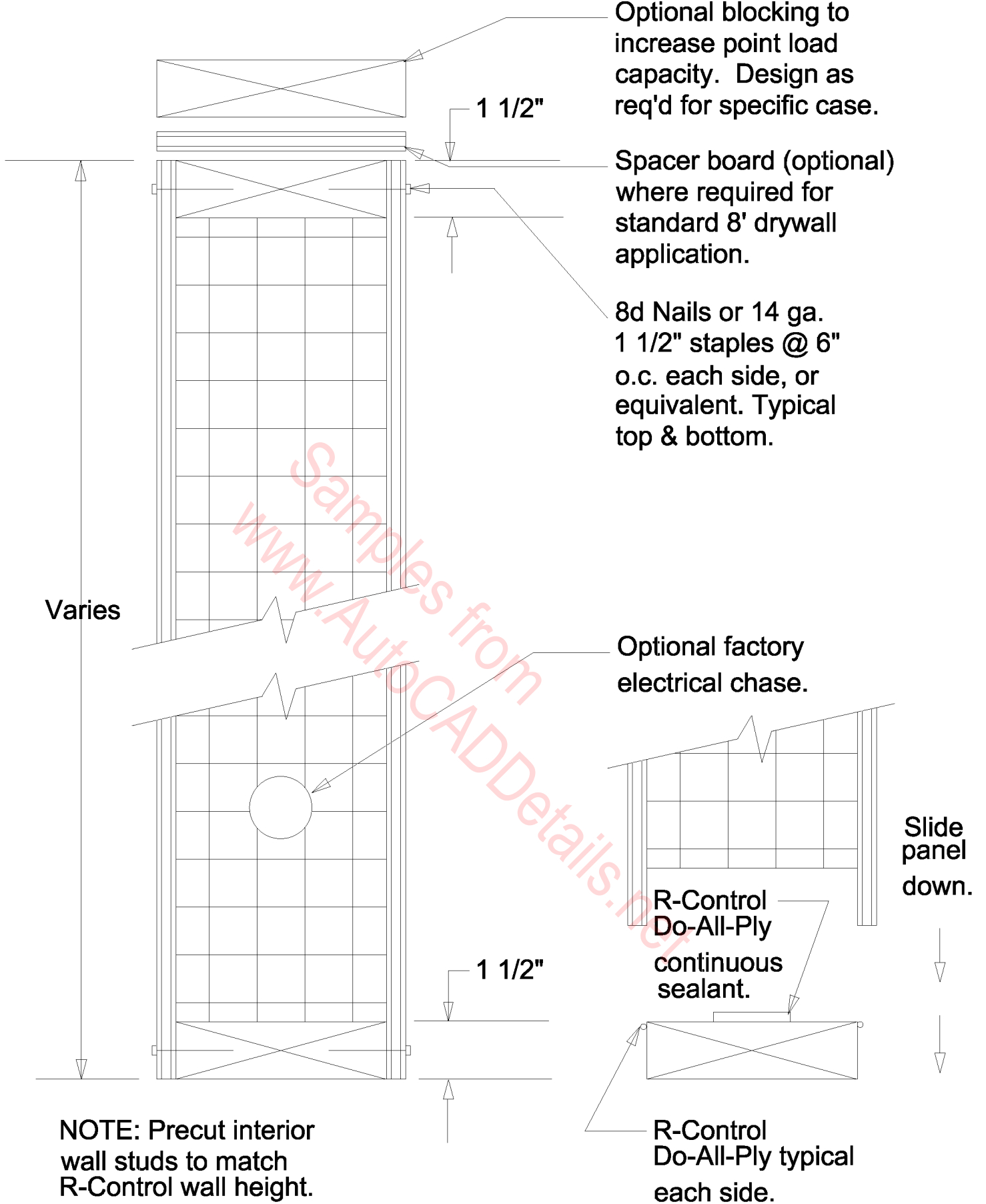
Diagram 5: 3 spans or greater  
(multiple points of attachment)

## Notes:

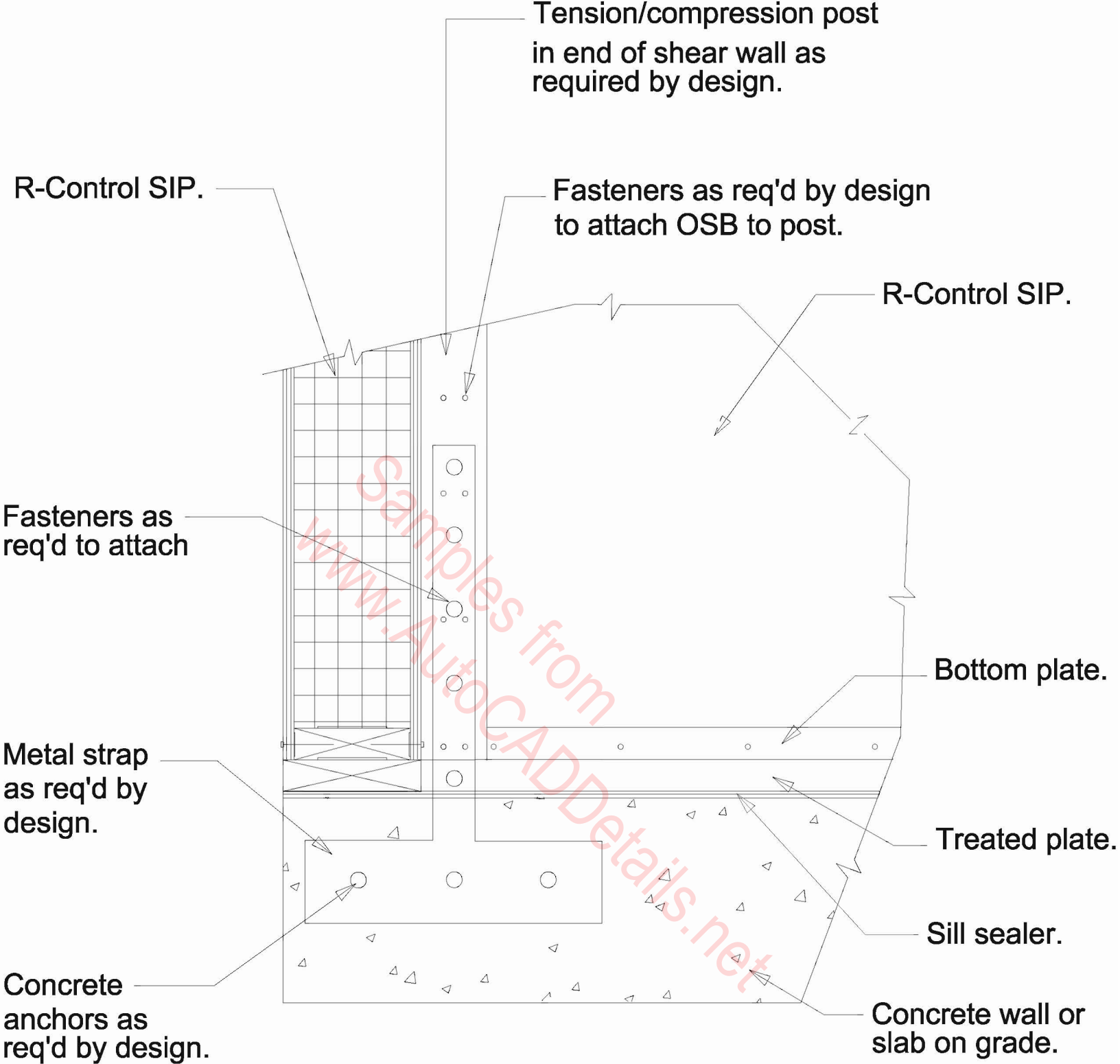
1. Perimeter attachment of roof panels requires a minimum of 1 fastener per 2 lineal feet of panel.
2. The recommendations shown are based on 90 psf of uplift resistance with a minimum screw penetration of 1".
3. The bottom of screw head must remain flush with top skin.
4. Attachment recommendations are for uplift only. Requirements for diaphragm or other bracing by others.

# R-Control SIPs Do's and Don'ts

- 1.) Do handle panels with care.
- 2.) Do provide adequate support for SIPs when storing them.  
Store SIPs laying flat and covered.
- 3.) Do store R-Control Do-All-Ply in a warm area for best application results in cold weather.
- 4.) Do place Do-All-Ply along the leading edge of wood being inset into panel.
- 5.) Do use R-Control Do-All-Ply on wood-to-wood, wood-to-EPS and EPS-to-EPS connections.
- 6.) Do provide level and square foundations or floors that support SIP walls.
- 7.) Do hold sill plate back from edge of rim board 7/16" to allow full bearing of SIP OSB skins.
- 8.) Do provide 1-1/2" diameter access holes in plating to align with electrical wire chases in SIPs.
- 9.) Do provide adequate bracing of panels during erection.
- 10.) Do remove debris from plate area prior to panel placement.
- 11.) Do not install SIPs directly on concrete.
- 12.) Do not drop SIPs on corners.
- 13.) Do not lift SIPs by top skin.
- 14.) Do not put plumbing in R-Control SIPs without consulting panel manufacturer.
- 15.) Do not overcut the skins for field-cut openings.
- 16.) Do not cut the skins for electrical chases, use factory provided chases in SIP core.



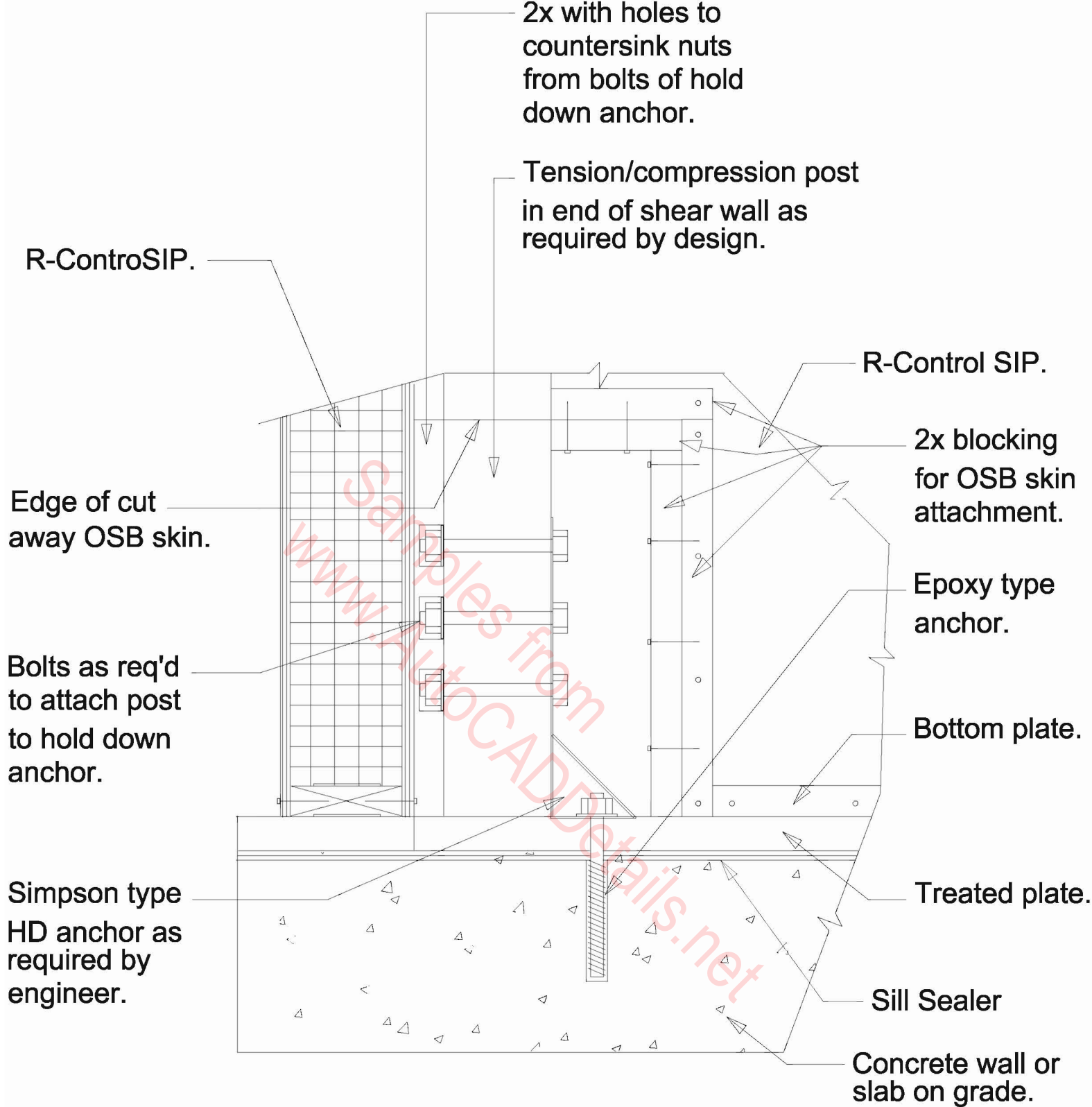
# SECTION



Note: Metal strap may be attached over the outside skin of the R-Control SIP. Use fasteners that will not affect finishing of the interior wall.

## SECTION

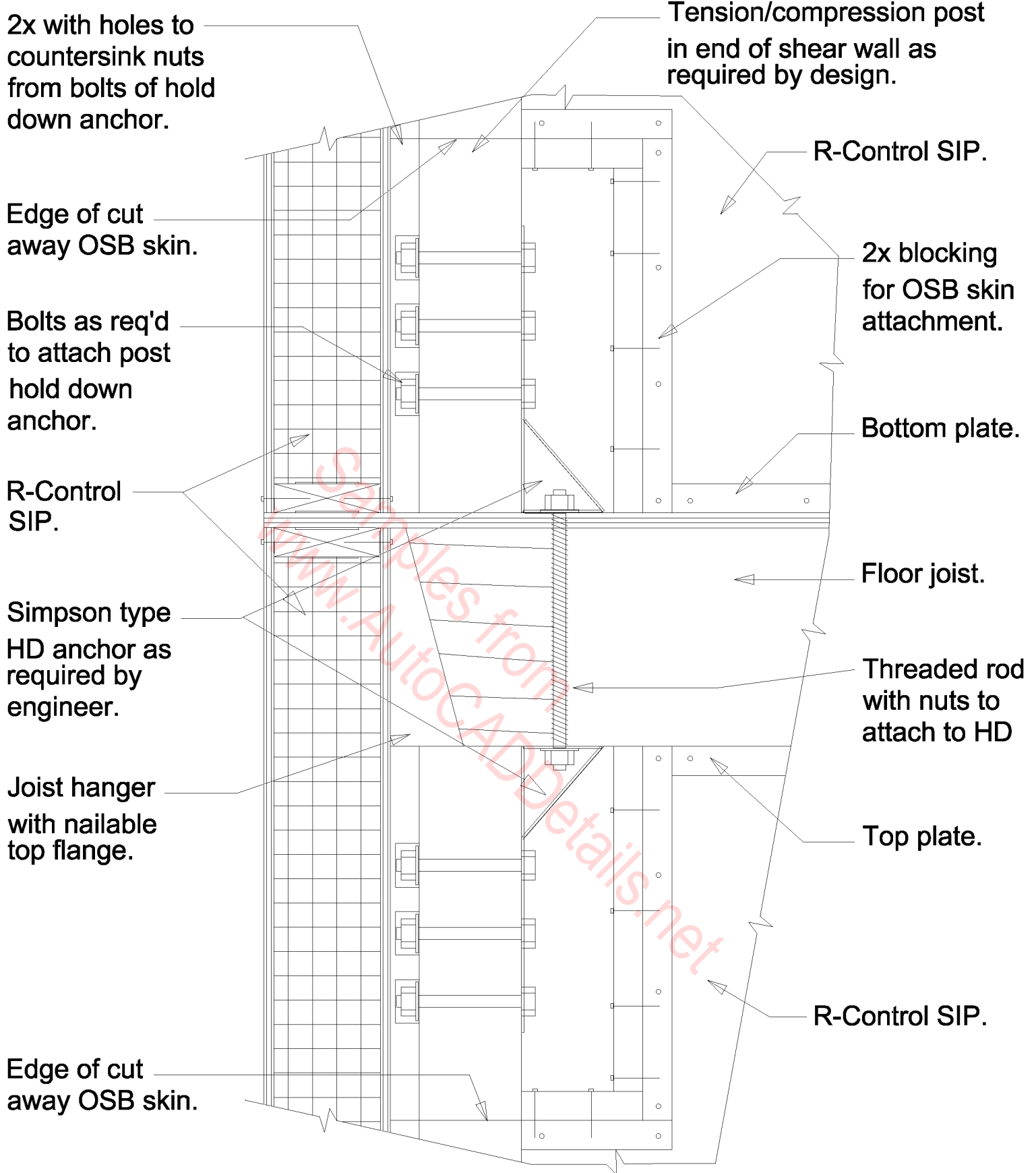
Post to Concrete Anchorage



Note: Cut panel skins to place HD type anchor, post and 2x plate. Use expanding foam to fill in area around hold down anchor. Replace OSB skin and nail to 2x blocking.

## SECTION

### Post to Concrete Anchorage

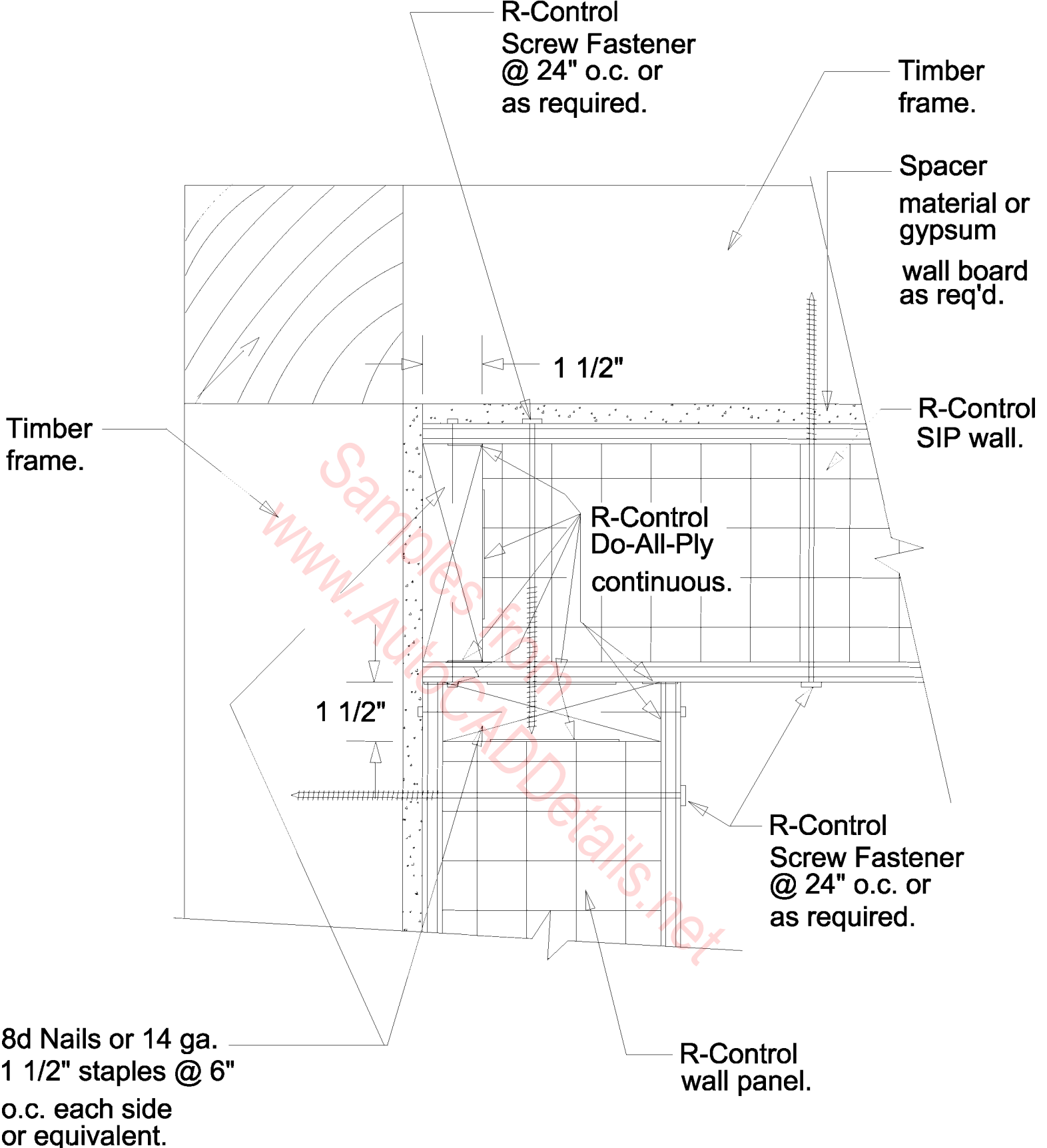


Note: Cut panel skins to place HD type anchor, post and 2x plate. Use expanding foam to fill in area around hold down anchor. Replace OSB skin and nail to 2x blocking.

## SECTION

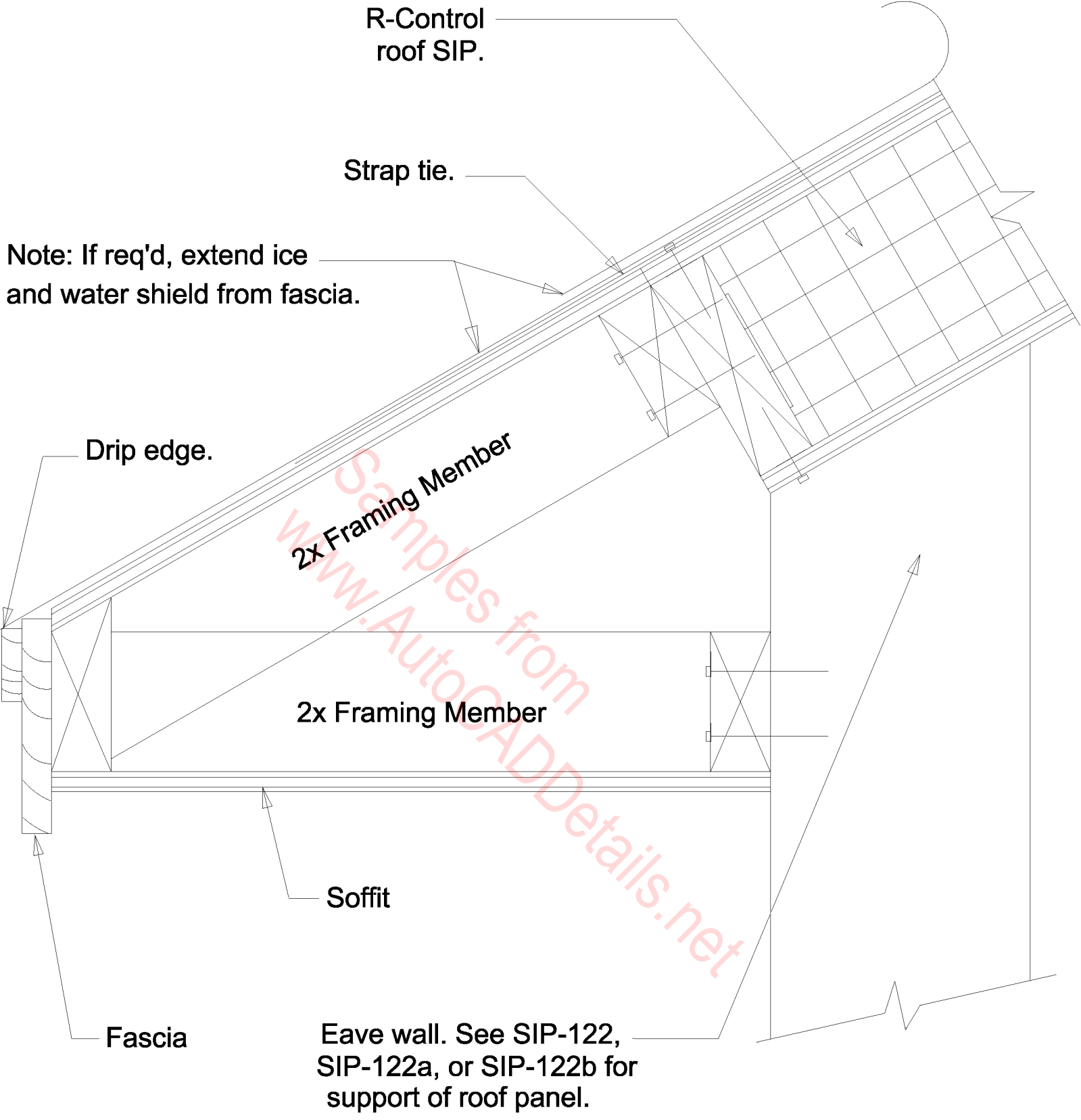
Post to Post through Floor





# SECTION

Reentrant Corner Connection



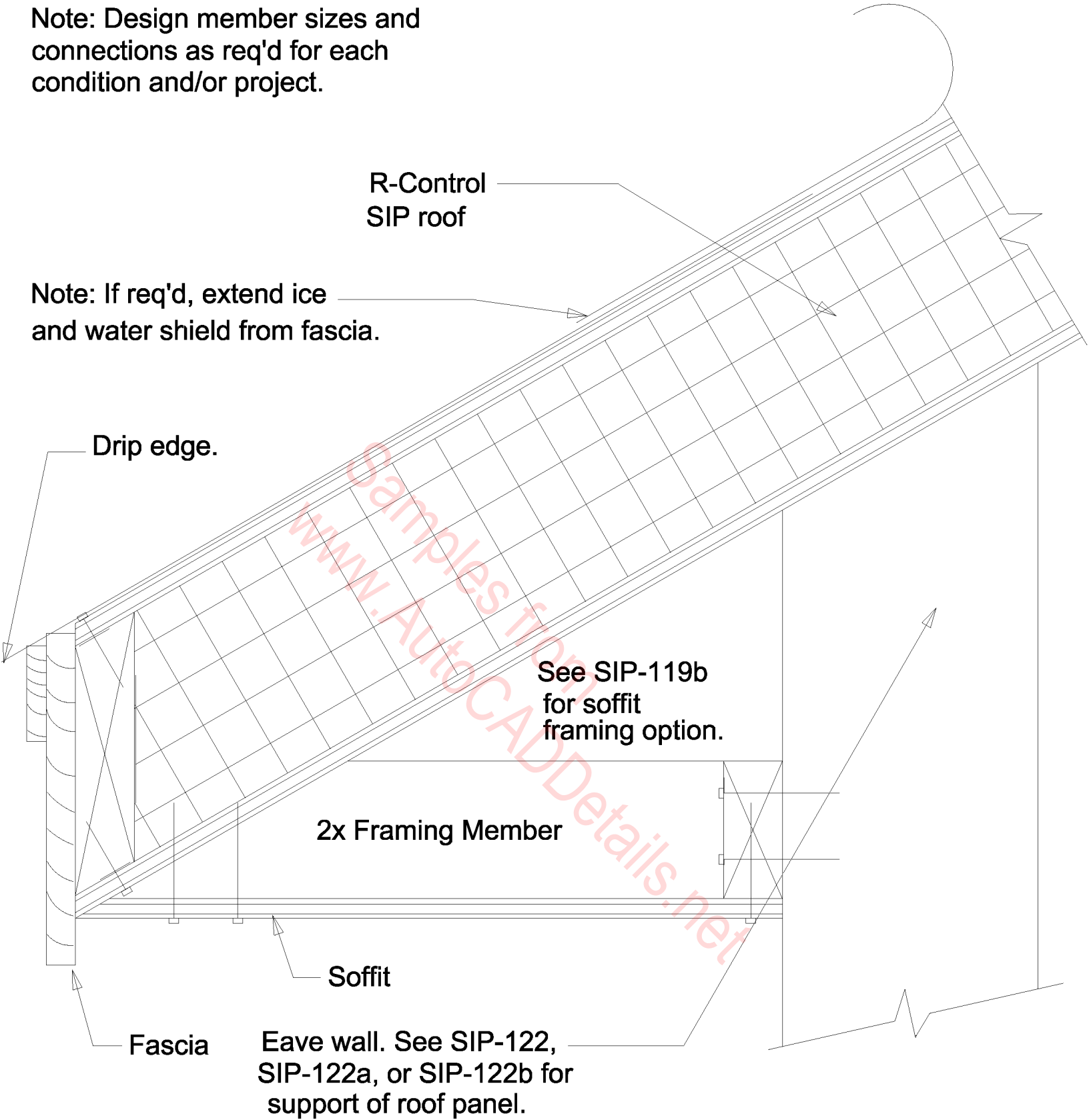
Note: Design member sizes and connections as req'd for each condition and/or project.

**SECTION**

**Roof Eave  
Built Up - Ladder Framed**

Note: Design member sizes and connections as req'd for each condition and/or project.

Note: If req'd, extend ice and water shield from fascia.



## SECTION

Roof Eave  
Plumb Cut - Cant Panel

Note: Design member sizes and connections as req'd for each condition and/or project.

Note: If req'd, extend ice and water shield from fascia.

R-Control  
SIP roof.

Drip edge

See SIP-119a  
for soffit  
framing option.

Soffit board.

Fascia

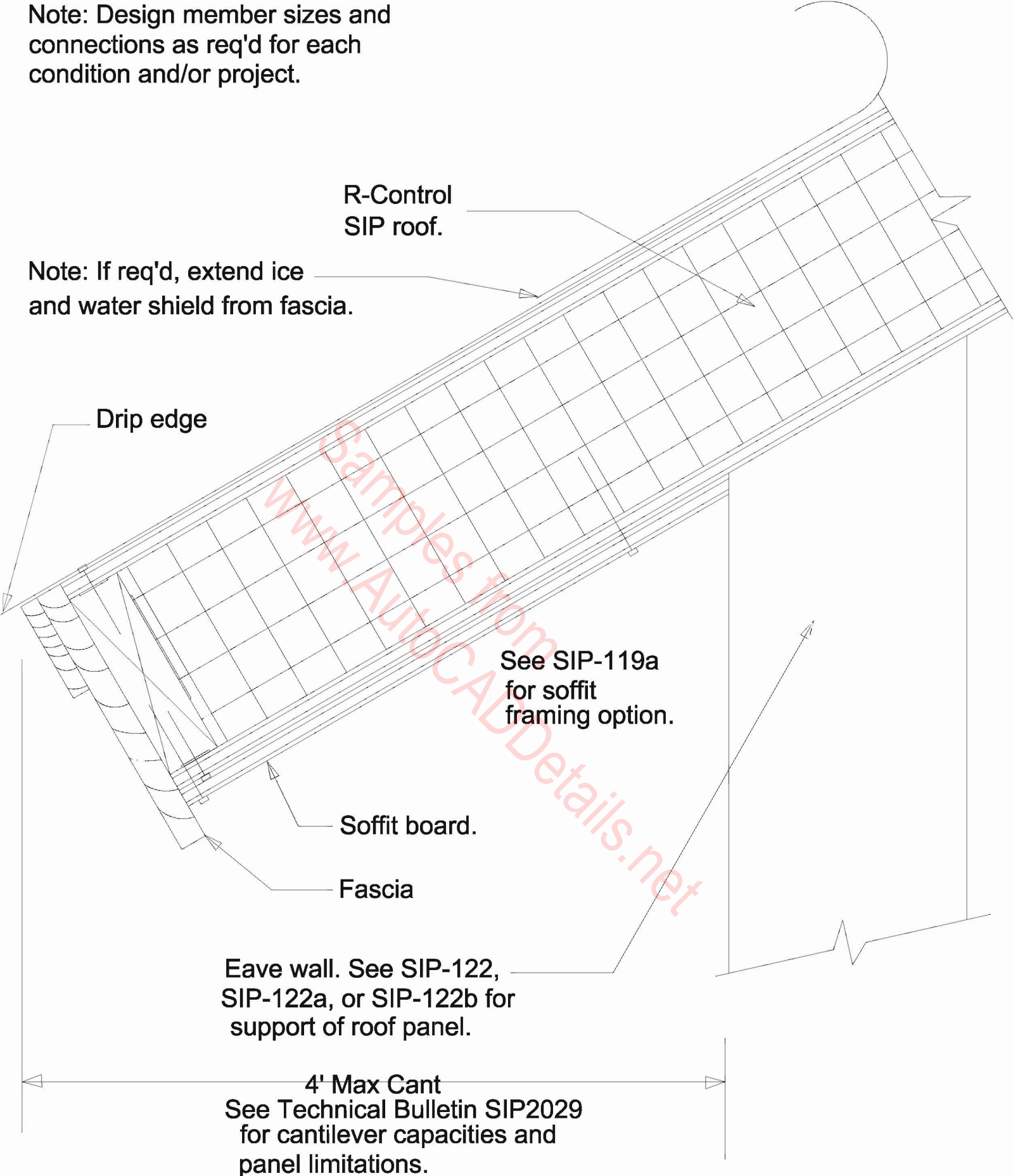
Eave wall. See SIP-122,  
SIP-122a, or SIP-122b for  
support of roof panel.

4' Max Cant  
See Technical Bulletin SIP2029  
for cantilever capacities and  
panel limitations.

**SECTION**

Roof Eave  
Square Cut - Cant Panel

www.AutocADDetails.net



R-Control Screw  
Fastener @ 24" o.c.

R-Control  
SIP roof.

Spacer material  
or gypsum wall  
board as req'd.

Note: If req'd, extend ice  
and water shield from fascia.

8d Nails or 14 ga.  
1 1/2" staples @ 6"  
o.c. each side  
or equivalent.

R-Control  
Do-All-Ply  
continuous.

Drip edge.

Fascia

Soffit board.

R-Control Screw  
Fastener @ 24" o.c.

4' Max Cant

See Technical Bulletin sip #2029  
for cantilever capacities and  
panel limitations.

R-Control  
SIP wall.

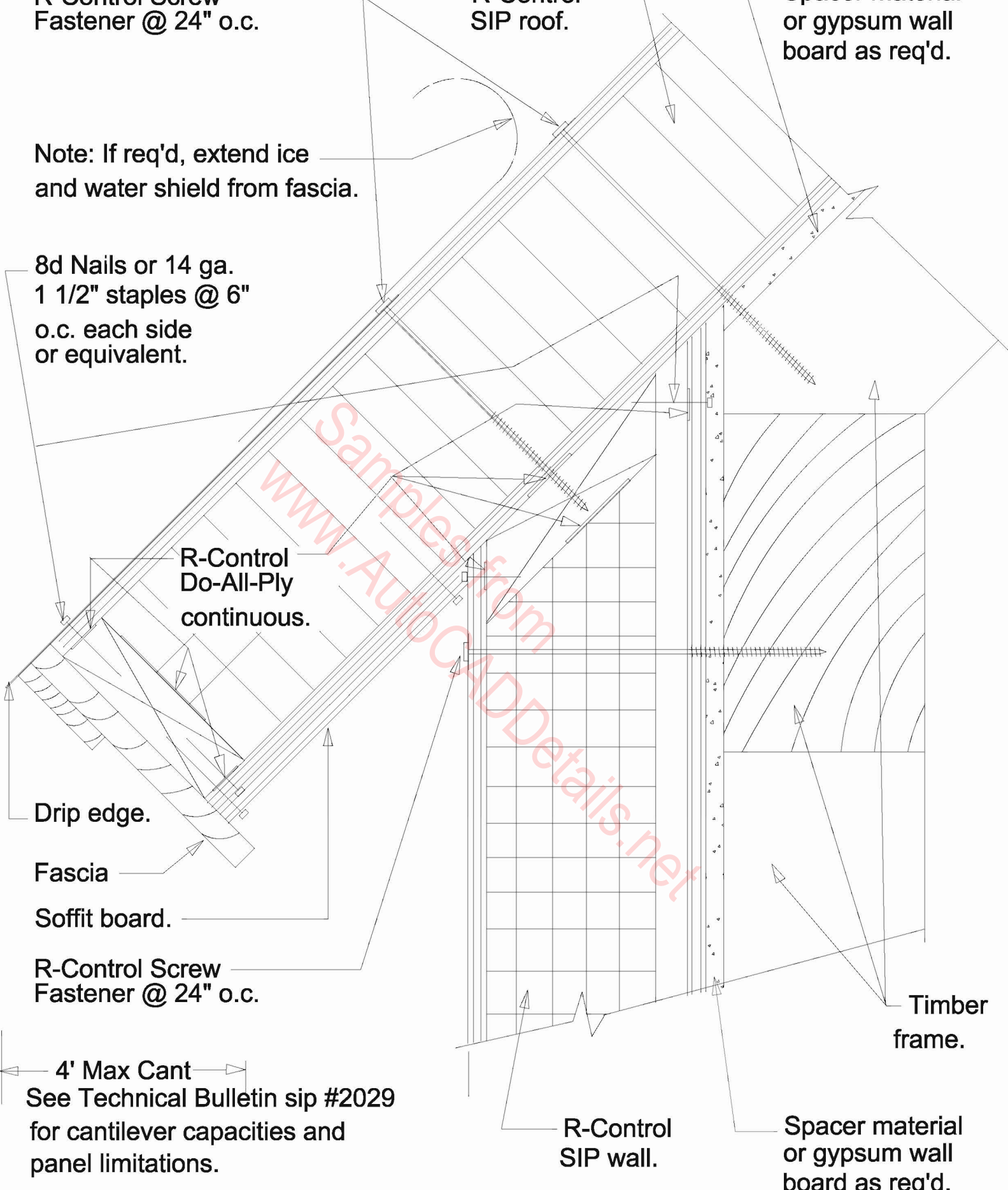
Spacer material  
or gypsum wall  
board as req'd.

Timber  
frame.

## SECTION

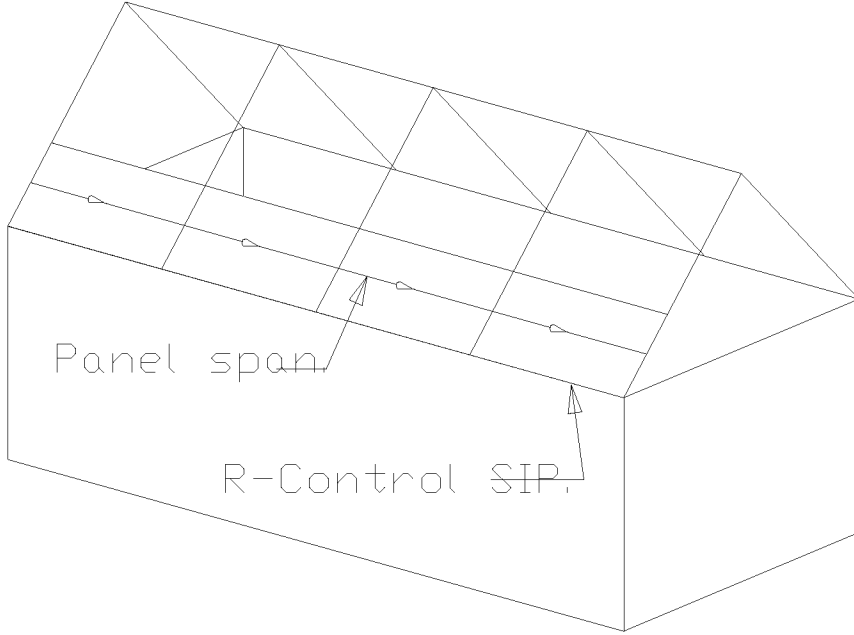
Roof Eave  
Square Cut - Cant Panel

www.AutocADDetails.net



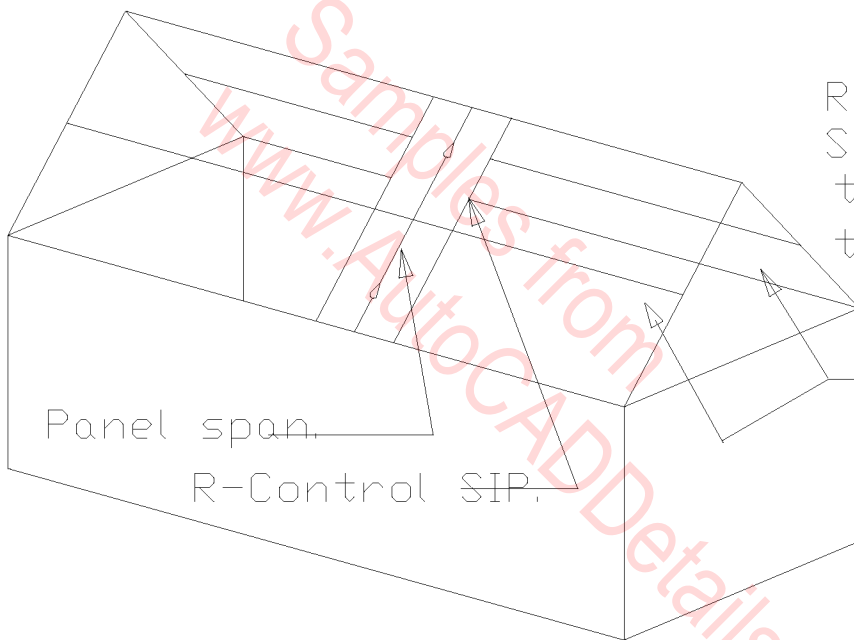
### RAFTER SYSTEM

SIPs supported by rafters spanning from the ridge beam to the eave walls.



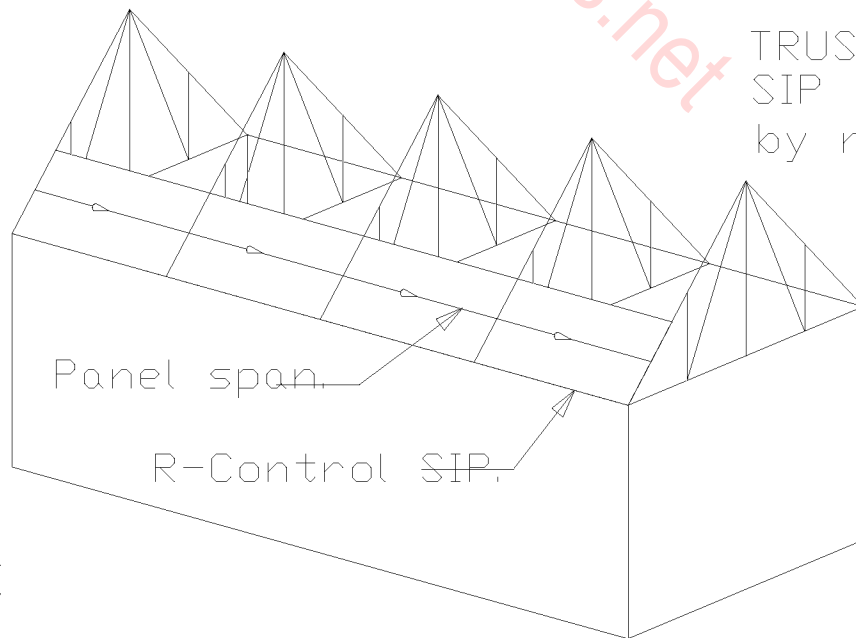
### RIDGE BEAM SYSTEM

SIPs supported by the ridge beam and the eave walls.



### TRUSS SYSTEM

SIP supported by roof trusses.



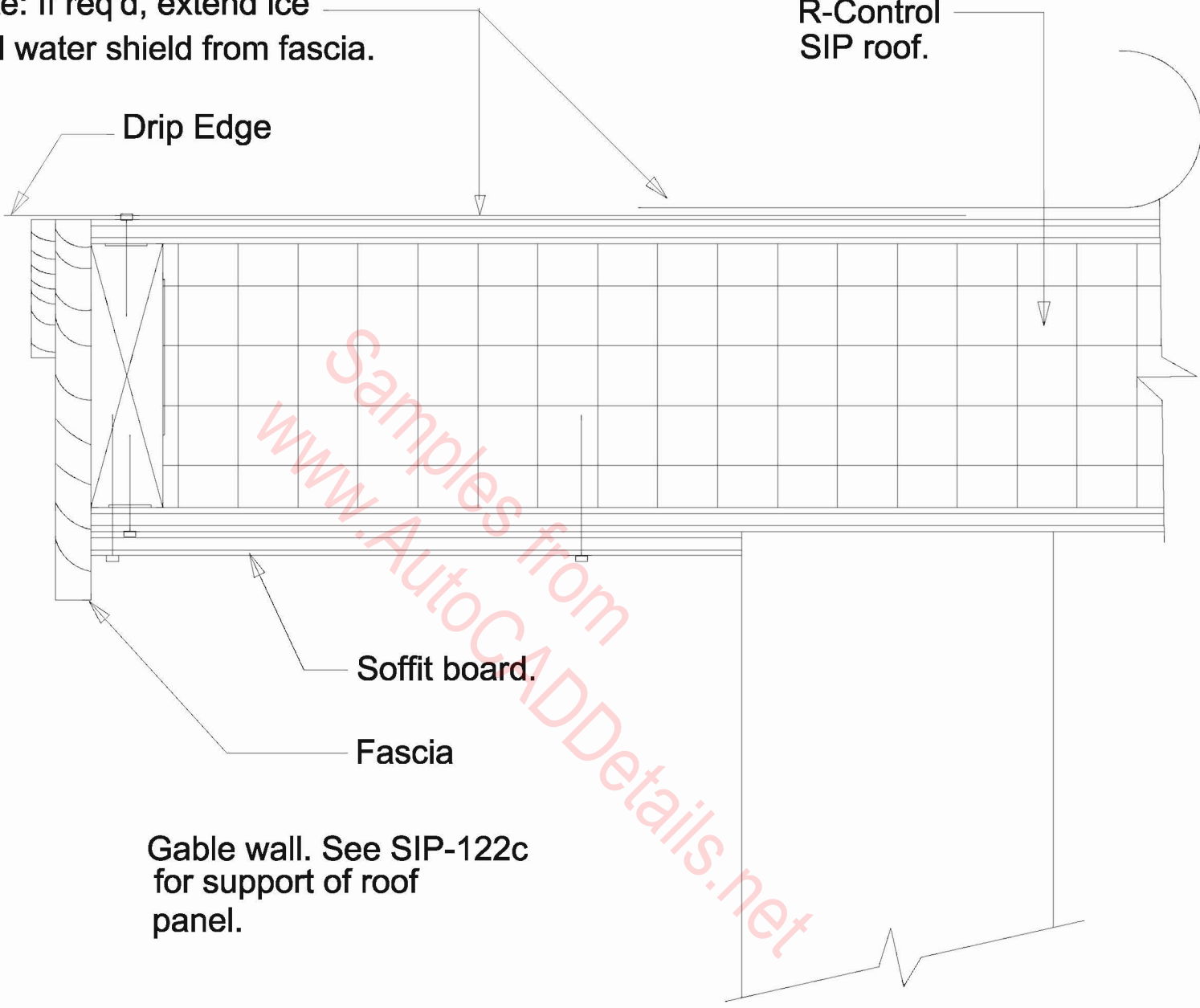
ISOMETRIC

Note: Design member sizes and connections as req'd for each condition and/or project.

Note: If req'd, extend ice and water shield from fascia.

R-Control SIP roof.

Drip Edge



Soffit board.

Fascia

Gable wall. See SIP-122c for support of roof panel.

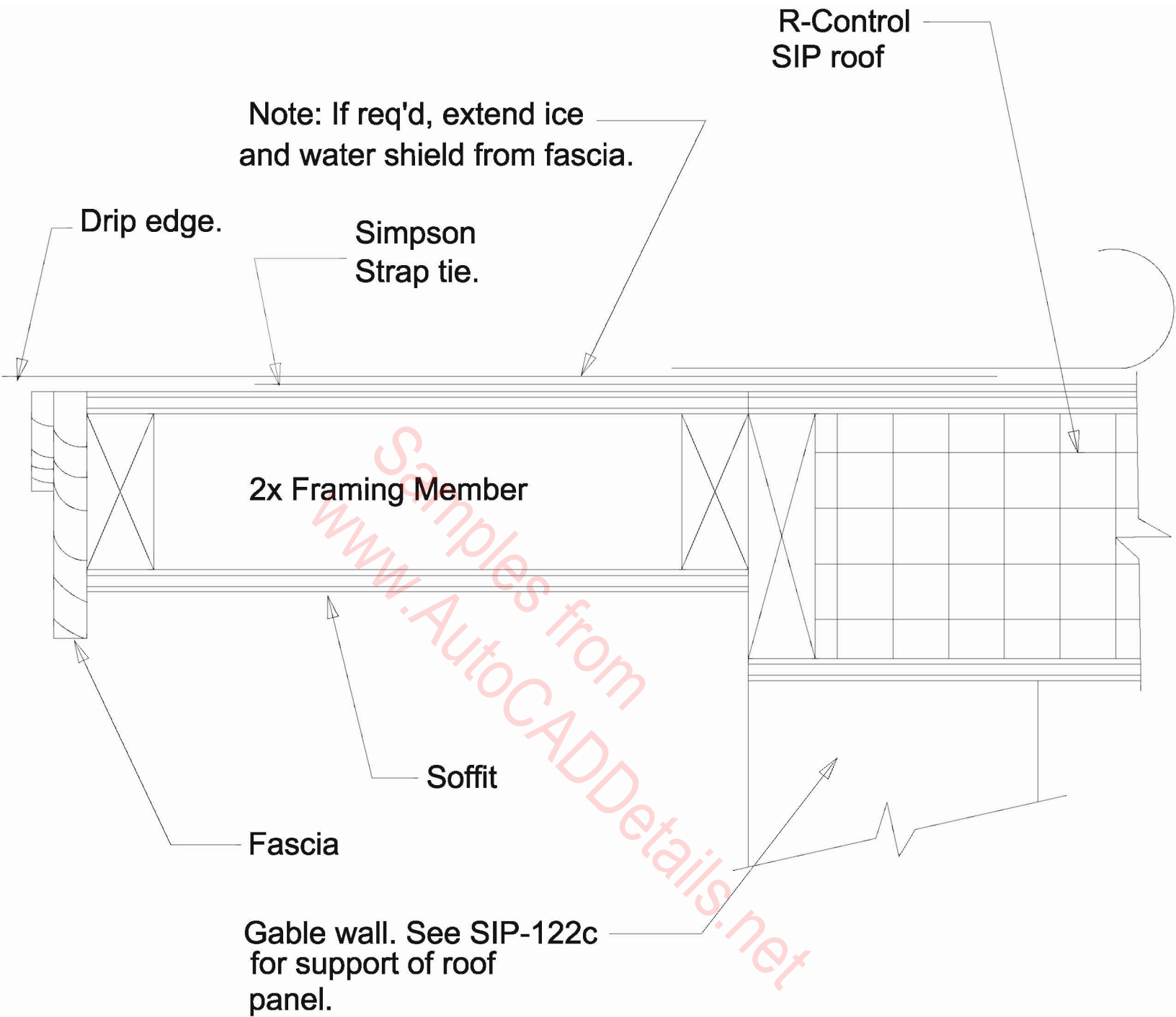
4' Max Cant

See Technical Bulletin #2029 for cantilever capacities and panel limitations.

# SECTION

Roof Gable  
Square Cut - Cant Panel





Note: Design member sizes and connections as req'd for each condition and/or project.

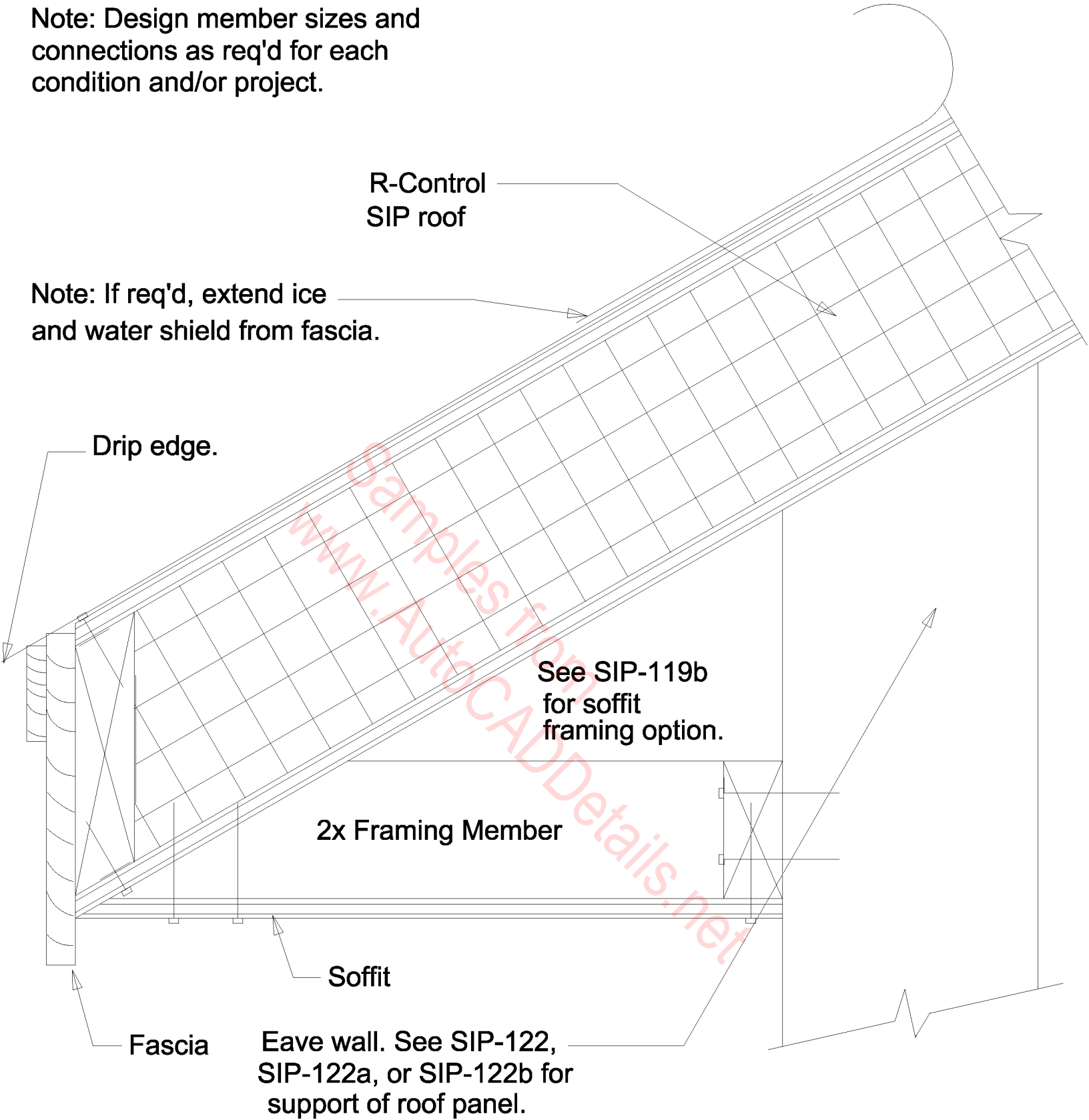
## SECTION

Roof Gable  
Built Up - Ladder Framed



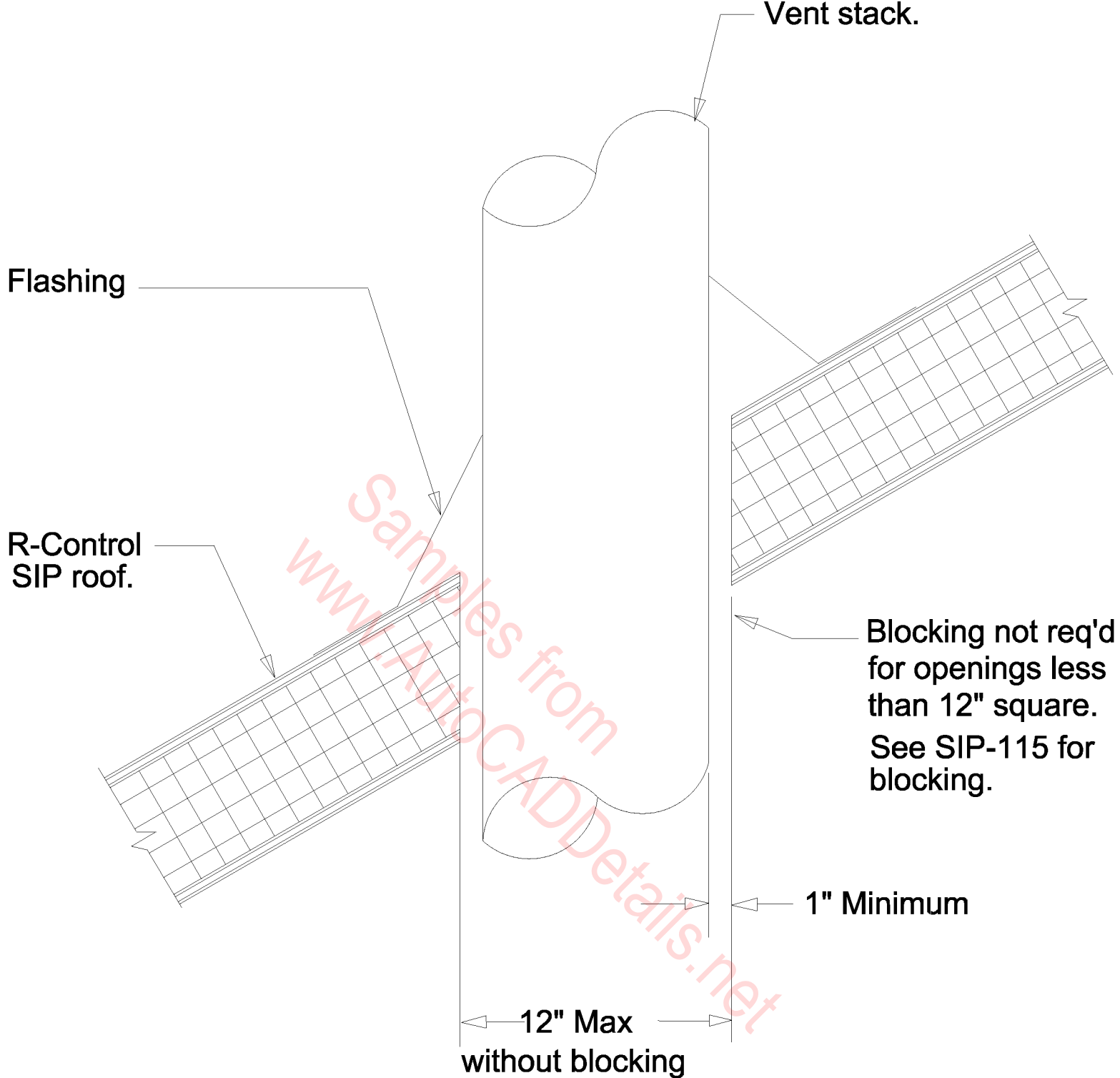
Note: Design member sizes and connections as req'd for each condition and/or project.

Note: If req'd, extend ice and water shield from fascia.



# SECTION

Roof Eave  
Plumb Cut - Cant Panel



Note: Recessed lights are not allowed in R-Control SIPs.

Note: Protect EPS core from temperatures of 160 F or above. Use zero clearance insulating material designed for high temps as req'd.

## SECTION

Note: Vapor retarder on warm side of panel should be utilized.

Fasten with 8d nails or 14 ga. 1 1/2" staples @ 6" o.c. both sides of panel joint or equivalent. Typical each side of panel.

Fasten with 2 rows of 16d nails at 6" o.c., staggered.

R-Control Do-All-Ply, each side.

Optional factory electrical chase.

R-Control SIP roof

Vapor retarder

R-Control Do-All-Ply each side, top & bottom.

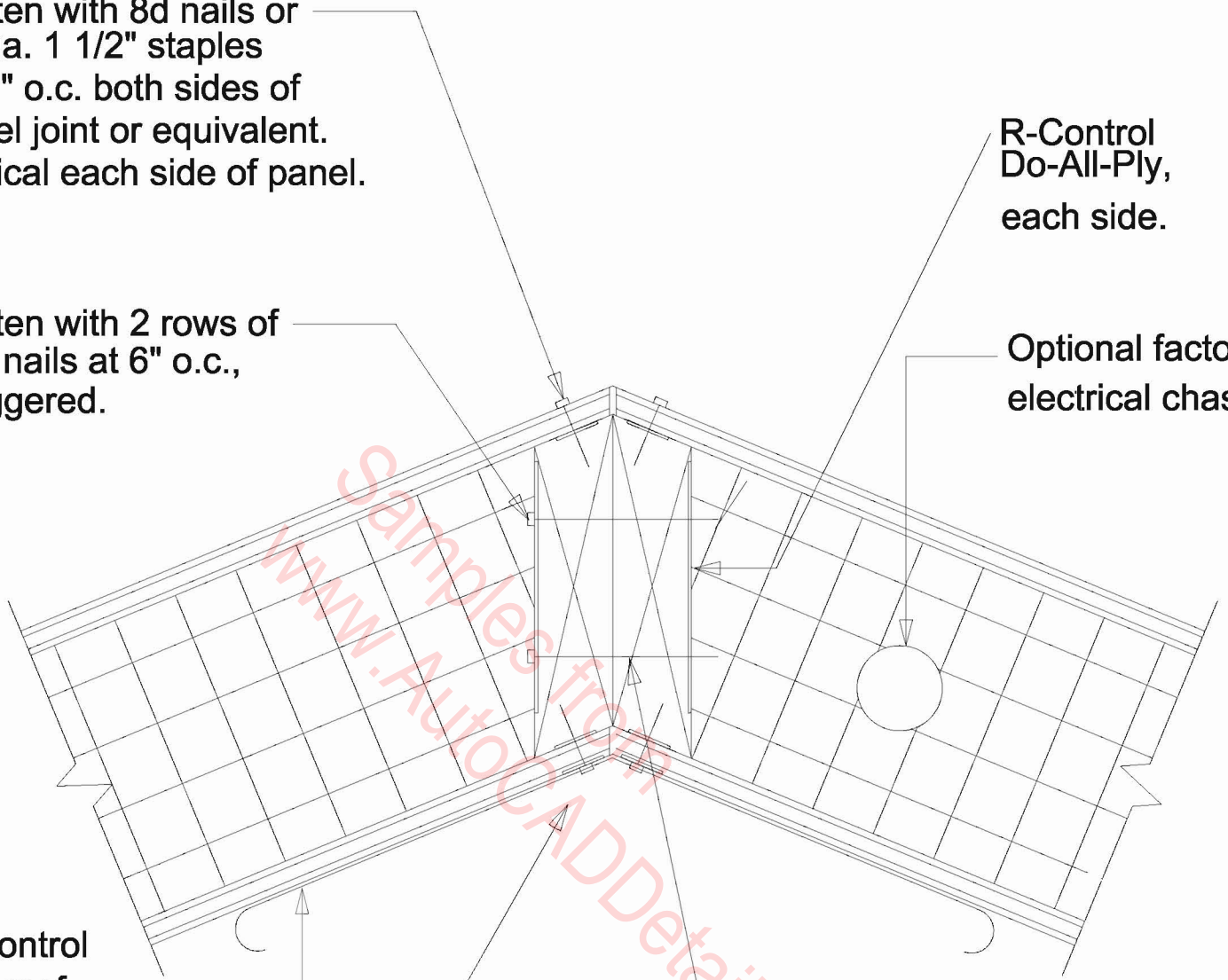
Double 2x splinre, bevel cut, with R-Control Do-All-Ply between 2x's.

NOTE: Structural support members max. of 4' from center line of ridge. Support members run parallel to ridge. Panels must have double 2x's, I-Joists or Insulated Spline Beams @ 4' o.c. See Technical Bulletin sip#2029 for cantilever capacities and panel limitations.

## SECTION

Roof Ridge

Plumb Cut/Cantilever Ridge



Note: Vapor retarder on interior of panel.

Fasten with 8d nails or 14 ga. 1 1/2" staples @ 6" o.c. both sides of panel joint or equivalent. Typical each side of panel.

R-Control screw, see SIP-135 for spacing requirements.

R-Control Do-All-Ply, each side.

Optional factory electrical chase.

R-Control SIP roof.

Vapor retarder

R-Control Do-All-Ply each side, top & bottom.

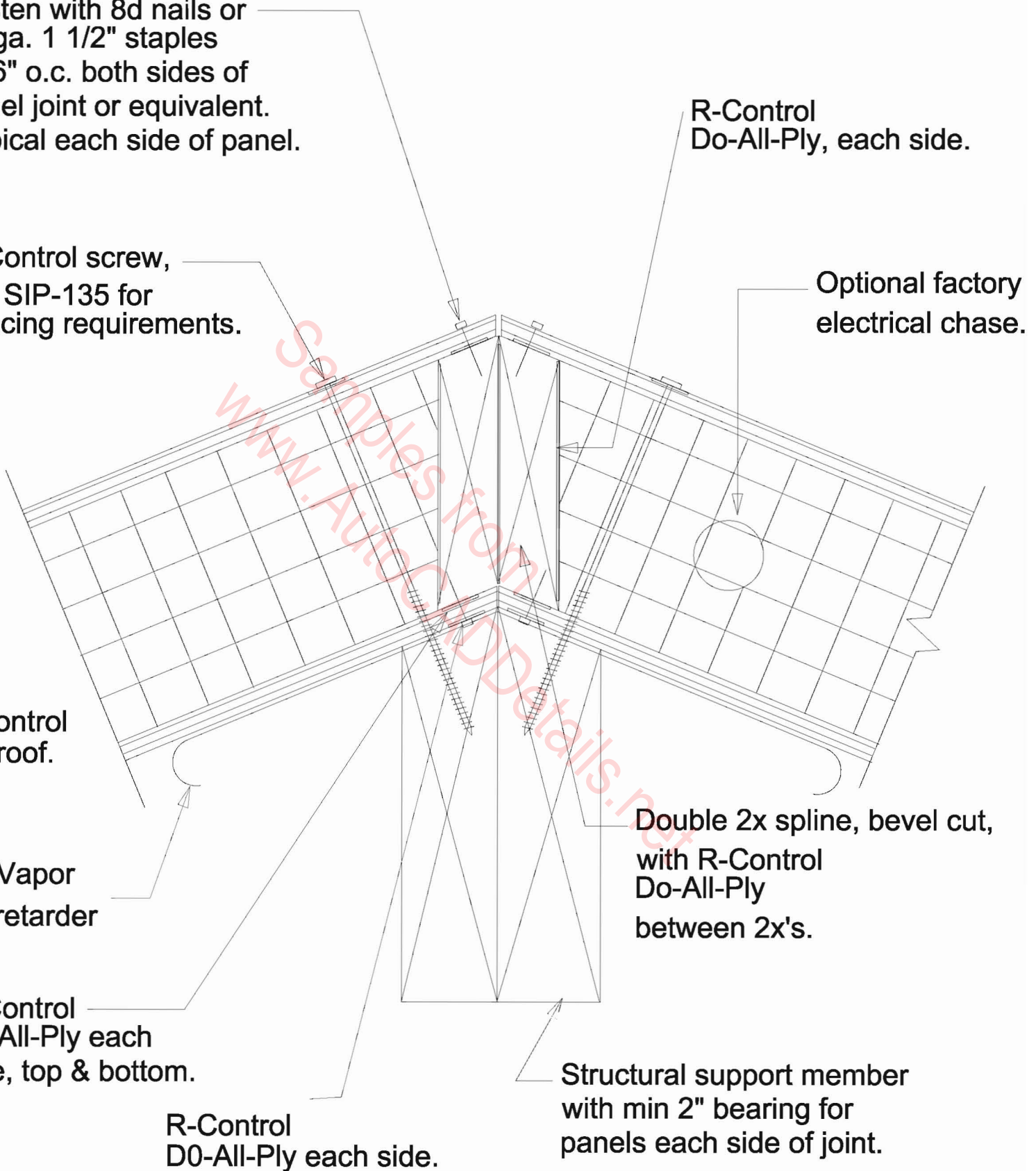
R-Control Do-All-Ply each side.

Double 2x spline, bevel cut, with R-Control Do-All-Ply between 2x's.

Structural support member with min 2" bearing for panels each side of joint.

## SECTION

Roof Ridge - Plumb Cut



Note: Vapor  
retarder on interior  
of panel.

Fasten with 8d nails or  
14 ga. 1 1/2" staples  
@ 6" o.c. both sides of  
panel joint or equivalent.  
Typical each side of panel.

EPS ridge filler piece.

Simpson strap tie  
4' o.c. minimum.

R-Control screw,  
see SIP-135 for  
spacing requirements.

R-Control  
Do-All-Ply  
each side.

Optional factory  
electrical chase.

R-Control  
SIP roof .

Vapor  
retarder

R-Control  
Do-All-Ply each  
side, top & bottom.

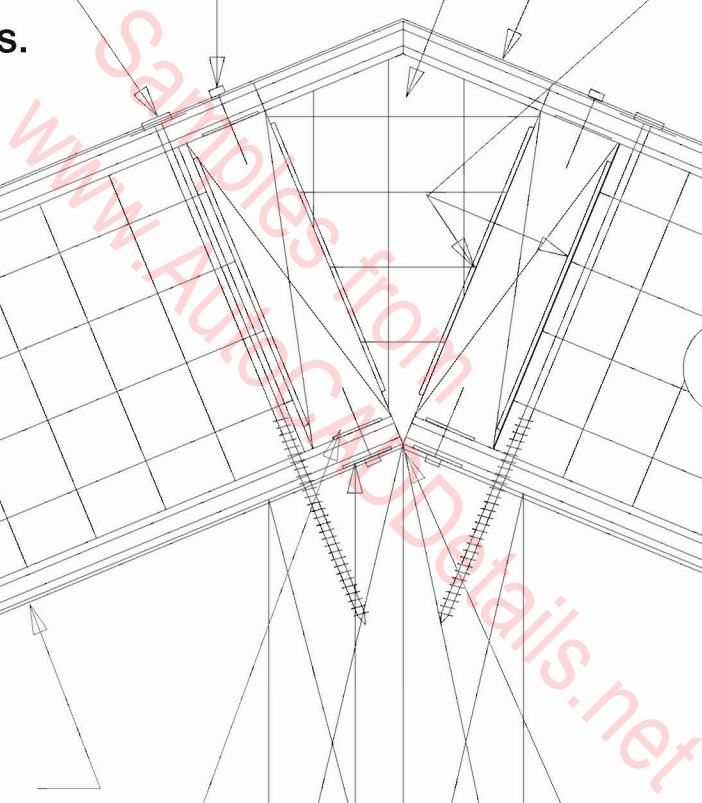
R-Control  
Do-All-Ply  
each side.

Do-All-Ply continuous  
along ridge line.

Structural support member  
with min 2" bearing for  
panels each side of joint.

## SECTION

Roof Ridge - Square Cut



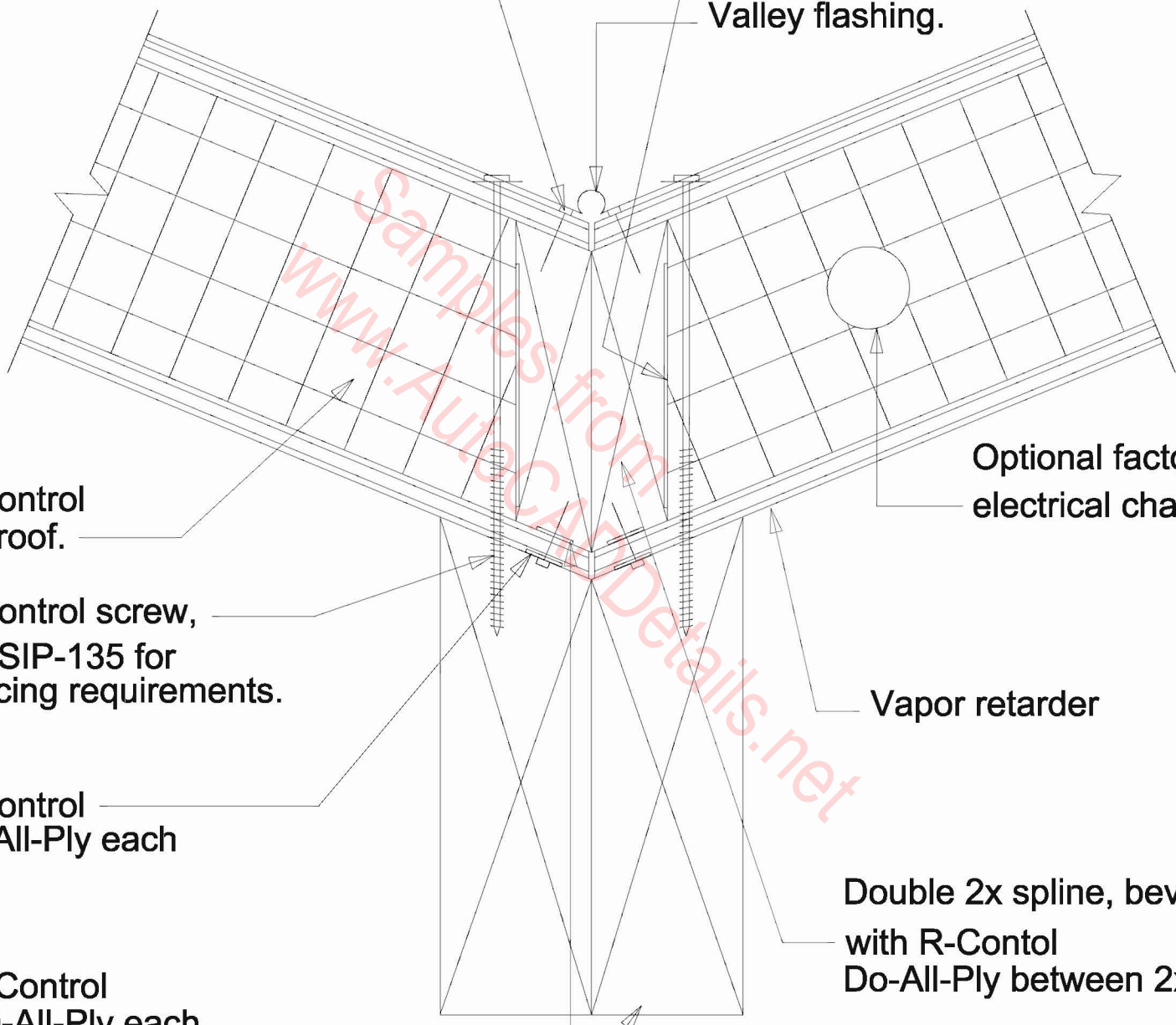


Note: Vapor retarder on warm side of panel should be utilized.

Fasten with 8d nails or 14 ga. 1 1/2" staples @ 6" o.c. both sides of panel joint or equivalent. Typical each side of panel.

R-Control Do-All-Ply, each side.

Valley flashing.



R-Control SIP roof.

Optional factory electrical chase.

R-Control screw, see SIP-135 for spacing requirements.

Vapor retarder

R-Control Do-All-Ply each

Double 2x spline, bevel cut, with R-Control Do-All-Ply between 2x's.

R-Control D0-All-Ply each side, top & bottom of member

Structural support member with min 3" bearing for panels each side of joint.

# SECTION

Roof Valley - Plumb Cut

Exterior finish & underlayment as req'd by code.

R-Control Do-All-Ply continuous.

R-Control Do-All-Ply, each side.

Field installed panel bottom plate.

Sill sealer.

Insect clip or flashing.

Caulk

R-Control Do-All-Ply.

Cementitious scratch coat.

Gypsum wall board.

R-Control SIP wall

16d nails as req'd by code.

8d Nails or 14 ga. 1 1/2" staples @ 6" o.c. each side or equivalent.

Treated sill plate.

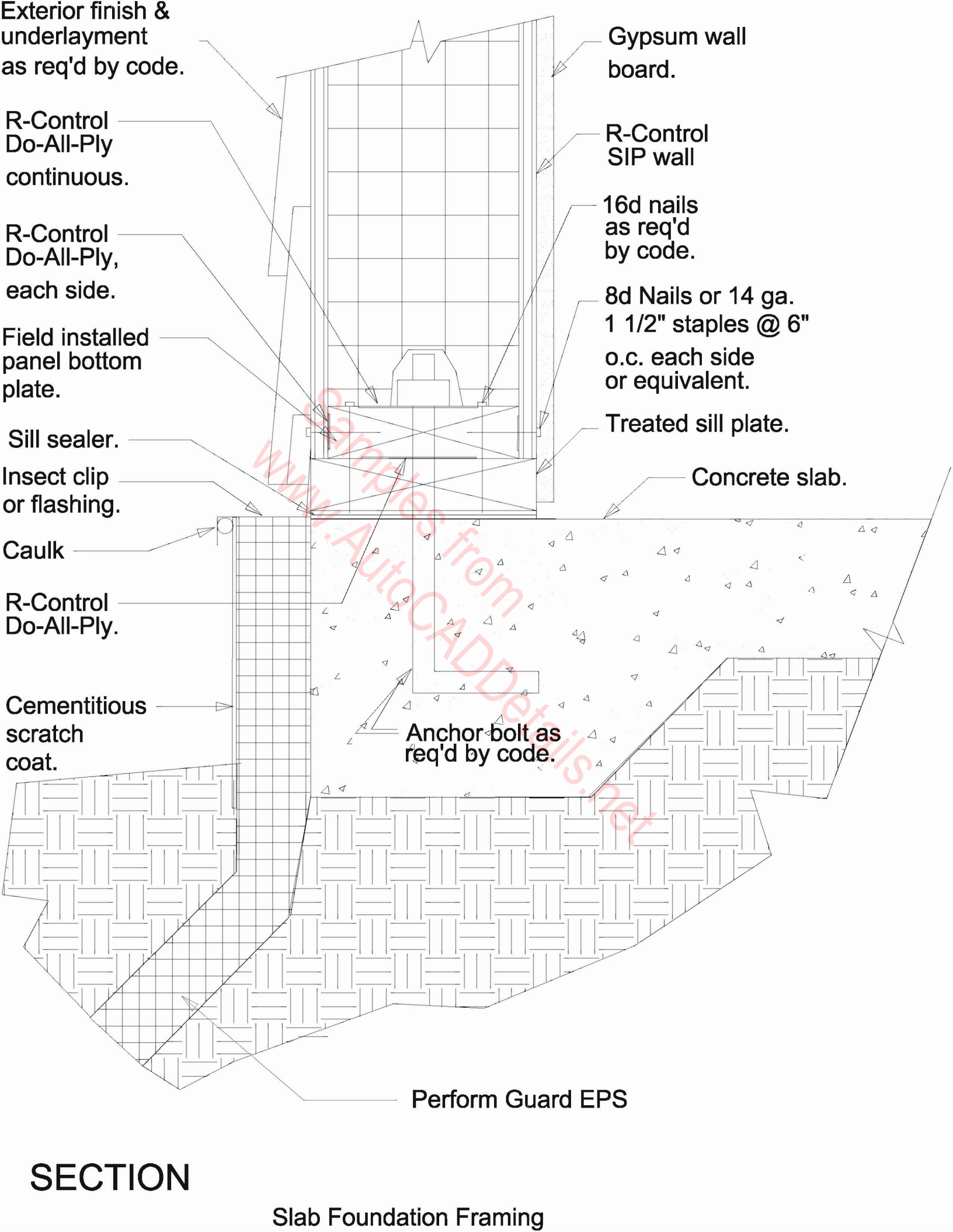
Concrete slab.

Anchor bolt as req'd by code.

Perform Guard EPS

# SECTION

## Slab Foundation Framing



Exterior finish & underlayment as req'd by code.

R-Control Do-All-Ply continuous.

R-Control Do-All-Ply, each side.

Field installed panel bottom plate.

Insect clip or flashing.

Caulk

R-Control Do-All-Ply.

Cementitious scratch coat.

Gypsum wall board.

R-Control SIP wall

8d Nails or 14 ga. 1 1/2" staples @ 6" o.c. each side or equivalent.

Capillary break, min 6 mil poly or min 3/8" treated plywood.

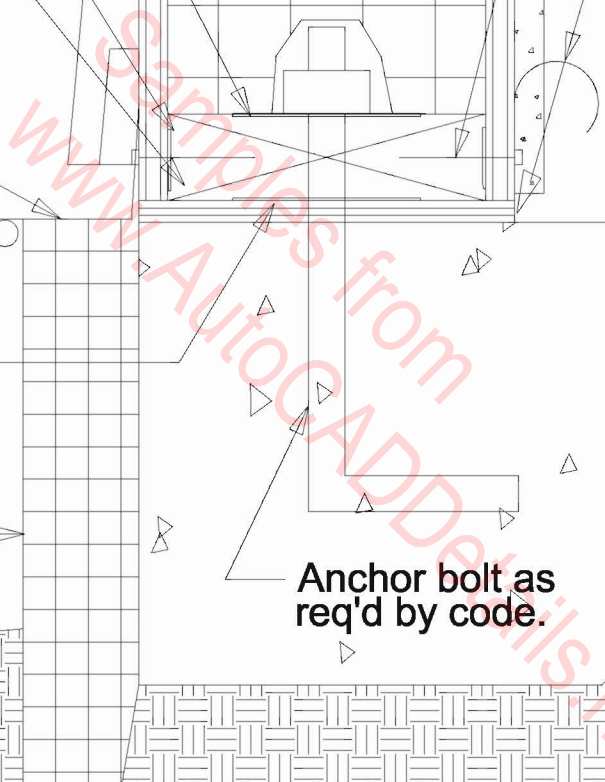
Concrete slab.

Anchor bolt as req'd by code.

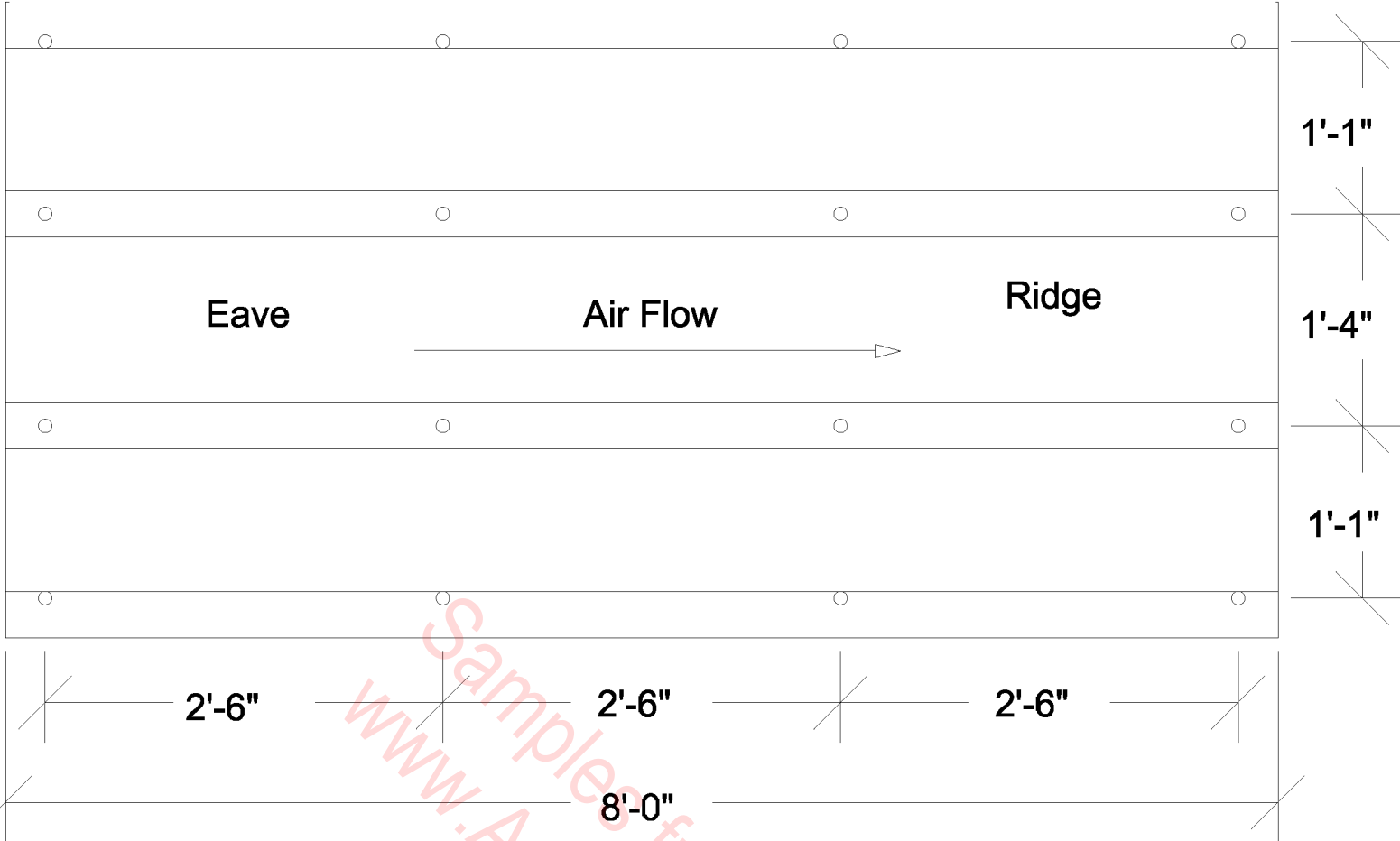
Perform Guard EPS

# SECTION

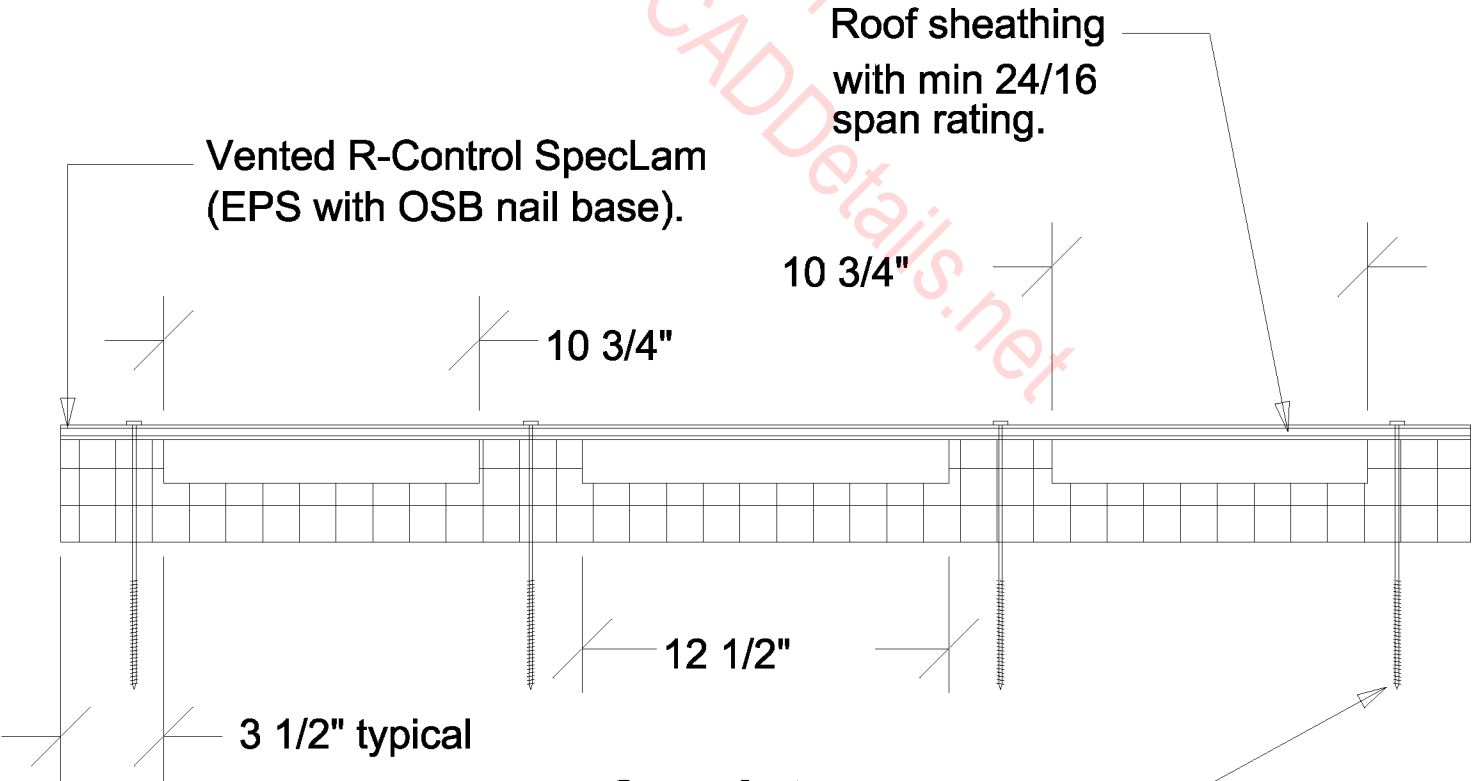
## Slab Foundation Framing





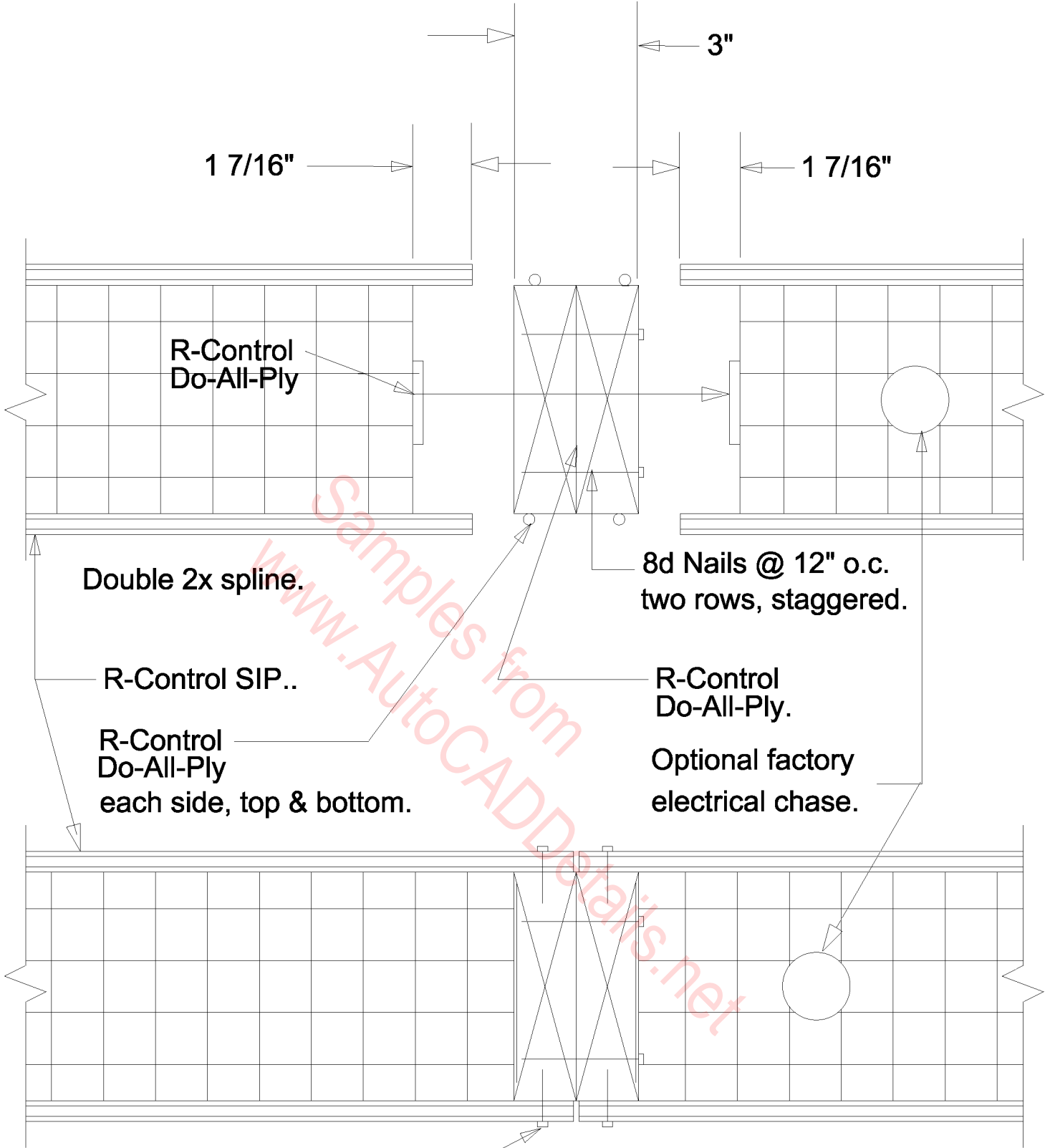


**PLAN**



**SECTION**

SpecLam Panel - Vented



R-Control  
Do-All-Ply

Double 2x spline.

R-Control SIP..

R-Control  
Do-All-Ply  
each side, top & bottom.

8d Nails @ 12" o.c.  
two rows, staggered.

R-Control  
Do-All-Ply.

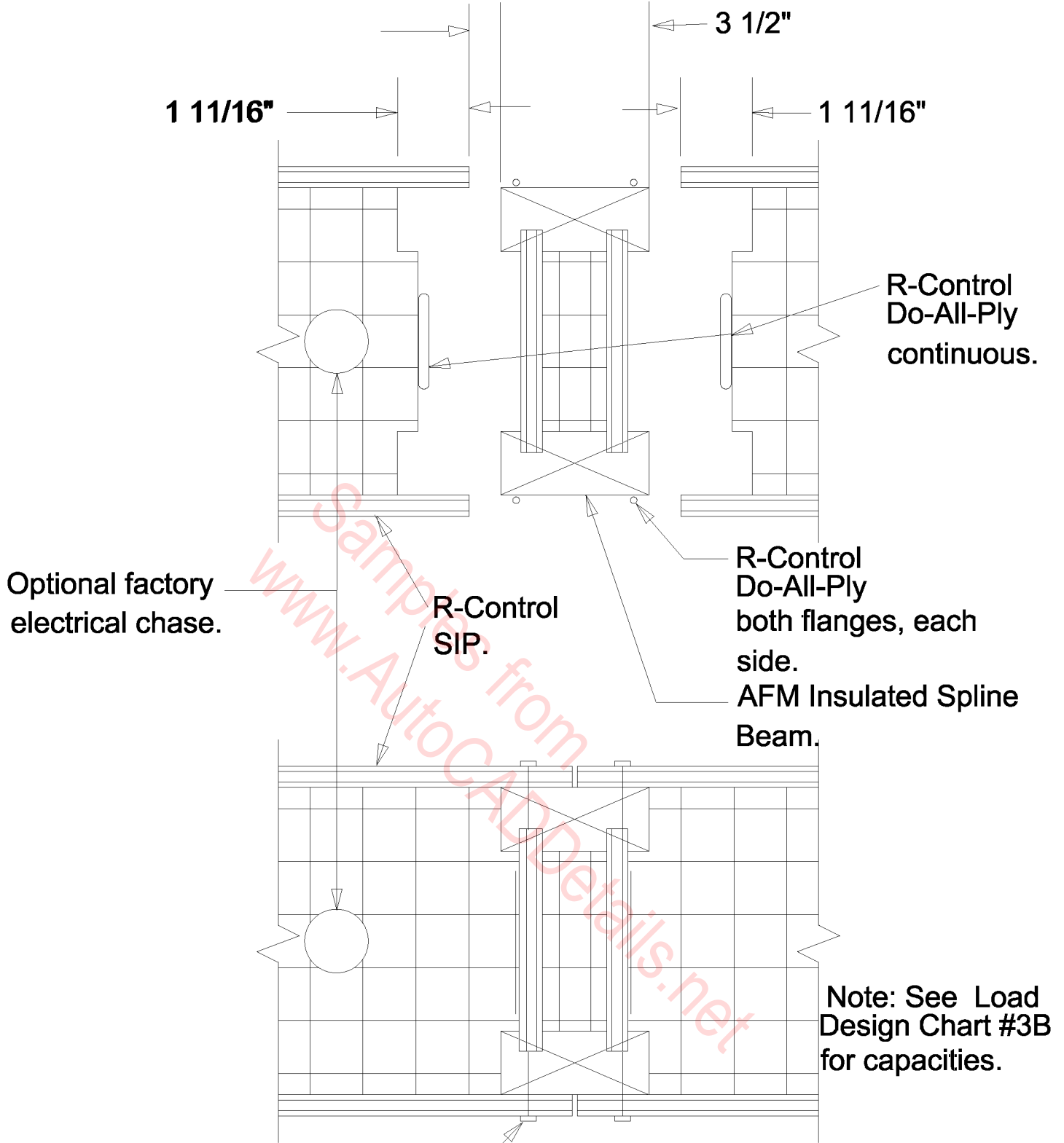
Optional factory  
electrical chase.

Fasten with 8d nails or  
14 ga. 1 1/2" staples  
@ 6" o.c. both sides of  
panel joint or equivalent.  
Typical each side of panel.

Note: Vapor retarder on  
warm side of panel  
should be utilized with  
double 2x splines.

# SECTION/PLAN

Spline Connection  
Double 2x



Optional factory electrical chase.

R-Control SIP.

R-Control Do-All-Ply continuous.

R-Control Do-All-Ply both flanges, each side.  
AFM Insulated Spline Beam.

Note: See Load Design Chart #3B for capacities.

Fasten with 8d nails or 14 ga. 1 1/2" staples @ 6" o.c. both sides of panel joint or equivalent. Typical each side of panel.

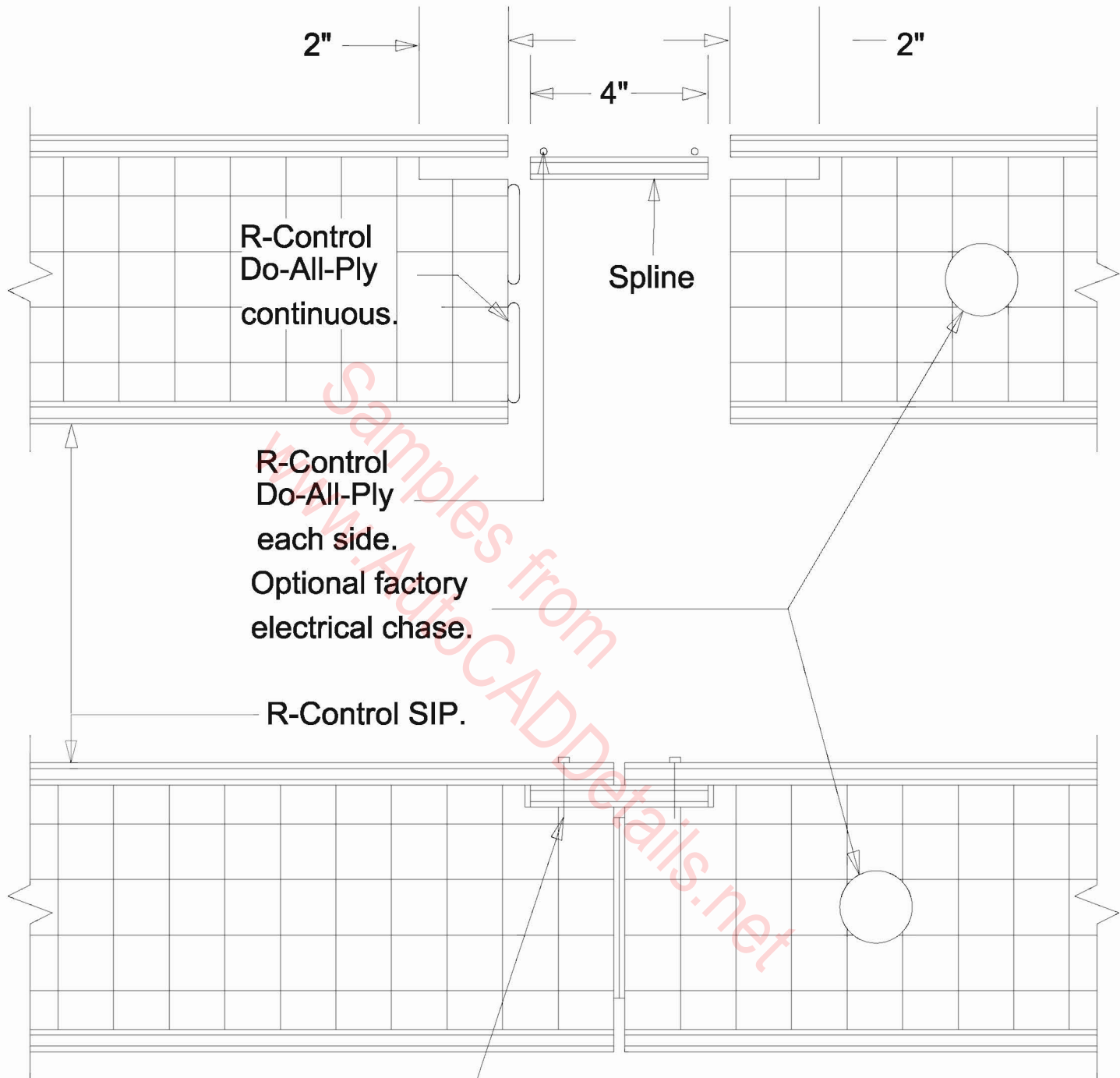
Note: Vapor retarder on warm side of panel should be utilized with Insulated Spline Beam spline.

## SECTION/PLAN

Spline Connection  
Insulated Spline Beam

Note: Refer to technical bulletin SIP#2031 for limitations under which this detail can be used

Note: Spline to be of material conforming to DOC PS2-92, min thickness equal to the panel.

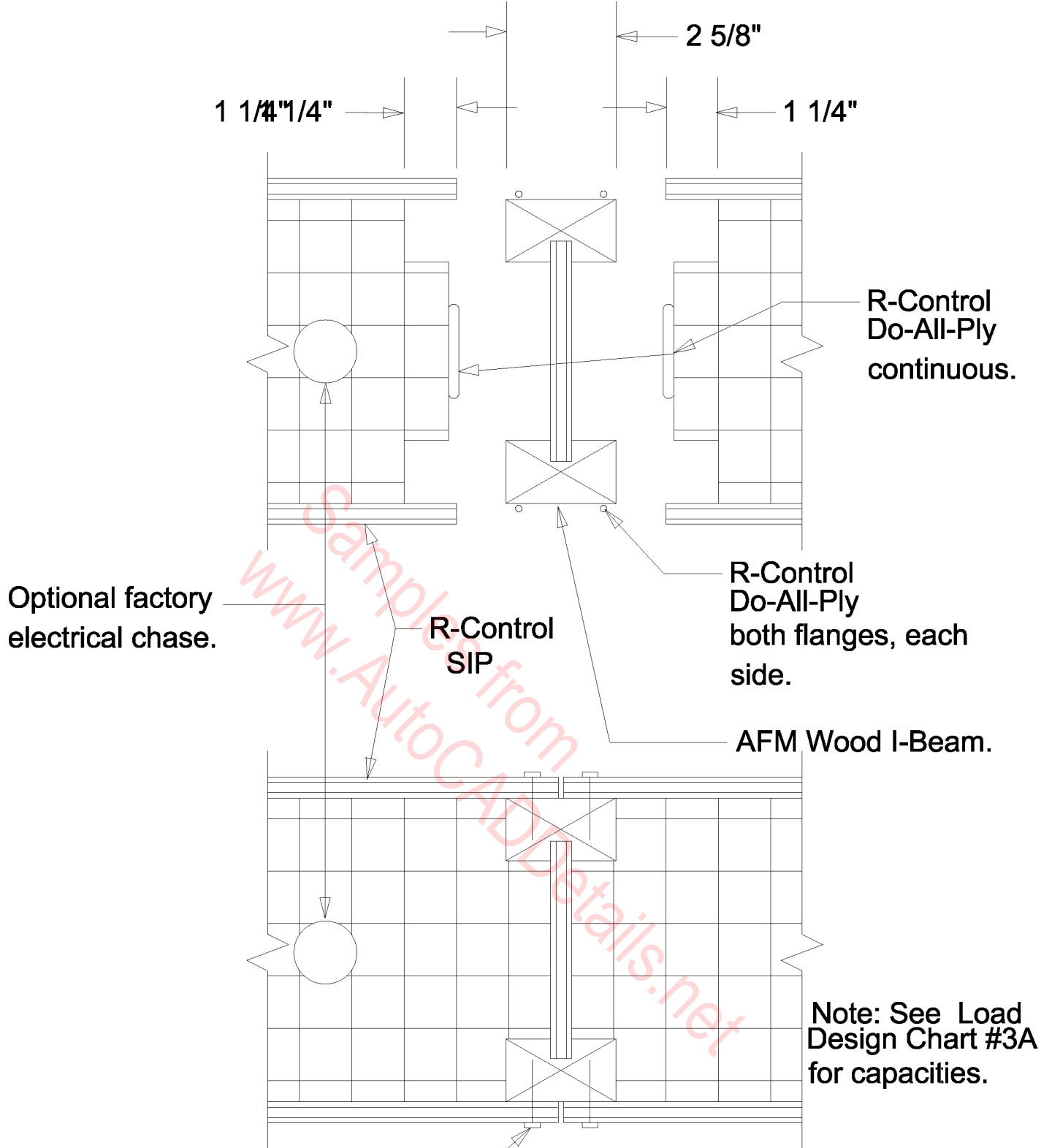


Fasten with 8d nails or 14ga. 1 1/2" staples @ 3" o.c. both sides of panel joint or equivalent.

Note: Spline to be of material conforming to APA PRP, min thickness equal to the panel skins.

## SECTION/PLAN

Spline Connection  
Surface Spline Top Side Only

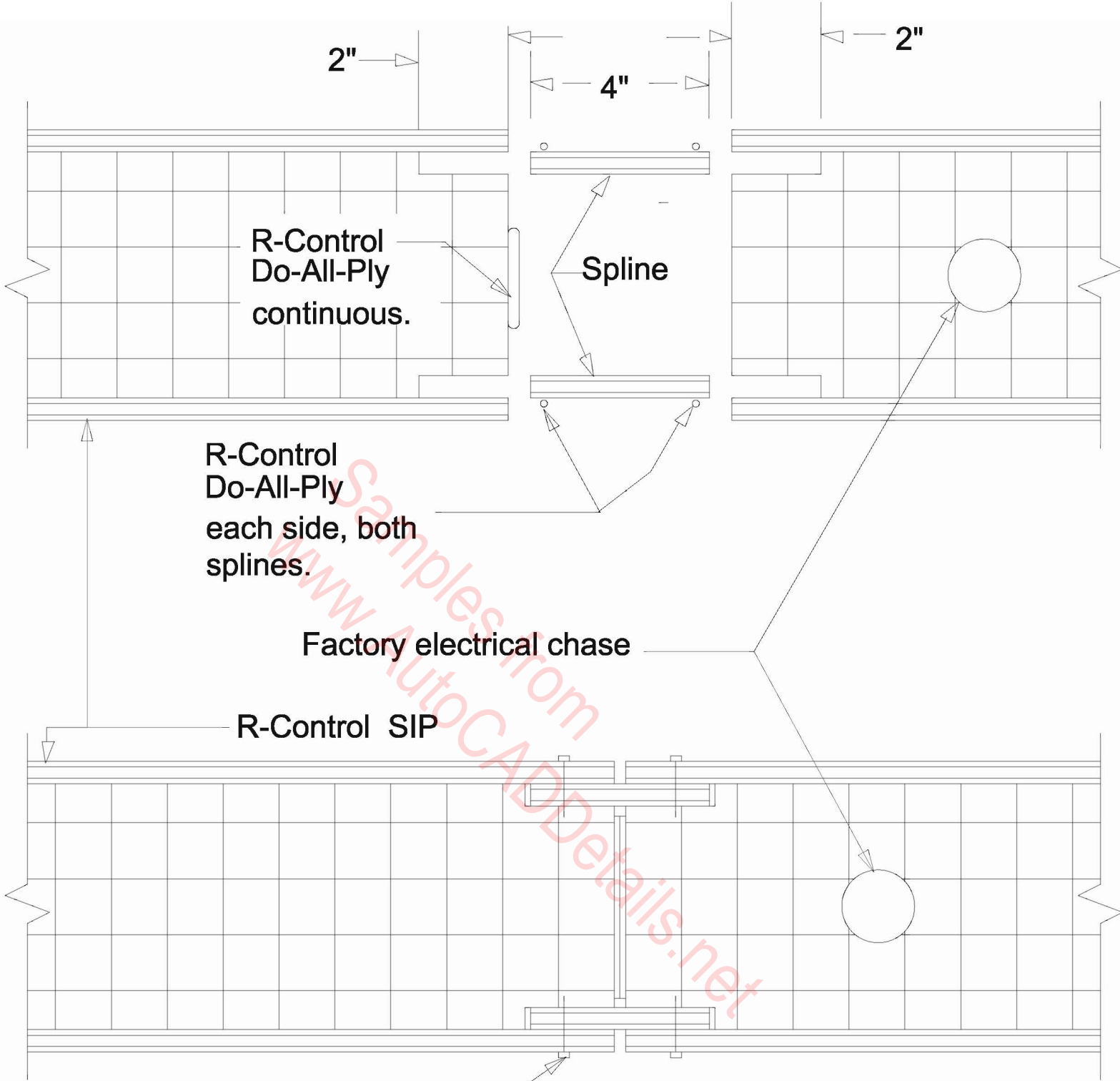


Fasten with 8d nails or 14 ga. 1 1/2" staples @ 6" o.c. both sides of panel joint or equivalent. Typical each side of panel.

Note: Vapor retarder on warm side of panel should be utilized with Wood I-Beam spline.

**SECTION/PLAN**

Spline Connection  
Wood I-Beam Connection



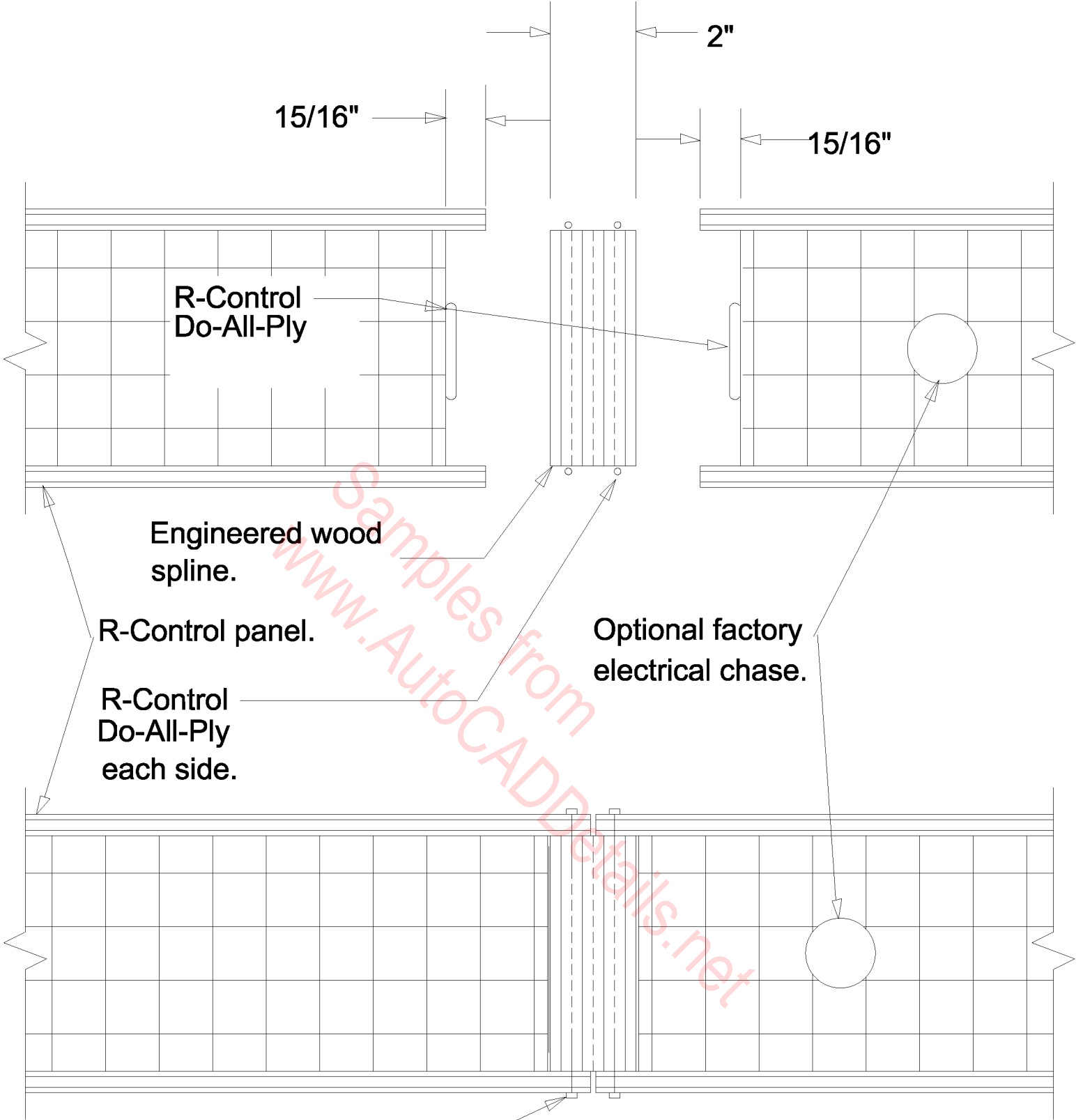
Samples from  
www.AutoCADDetails.net

Fasten with 8d nails or  
14 ga. 1 1/2" staples  
@ 6" o.c. both sides of  
panel joint or equivalent.  
Typical each side of panel.

**Note:** Vapor retarder  
recommended on  
interior of all panel  
when mandated by  
code or climatic  
conditions.

**SECTION/PLAN**

**Spline Connection  
Surface Spline**



Fasten with 8d nails or 14 ga. 1 1/2" staples @ 6" o.c. both sides of panel joint or equivalent. Typical each side of panel.

Note: Vapor retarder on warm side of panel should be utilized with

# SECTION/PLAN

Spline Connection  
Engineered Wood

Note: Refer to technical bulletin sip2031 for the limitations under which this detail can be used.

Note: Spline to be of material conforming to DOC PS2-92, min thickness equal to the panel skins.

Fasten with 8d nails or 14 ga. 1 1/2" staples @ 3" o.c. both sides of panel joint or equivalent. Top side of panel only.

R-Control SIP.

Spline

R-Control screw, see SIP-135 for spacing requirements.

R-Control Do-All-Ply continuous.

R-Control Do-All-Ply each side.

R-Control Do-All-Ply

Structure support member. Minimum 3" wide.

## SECTION

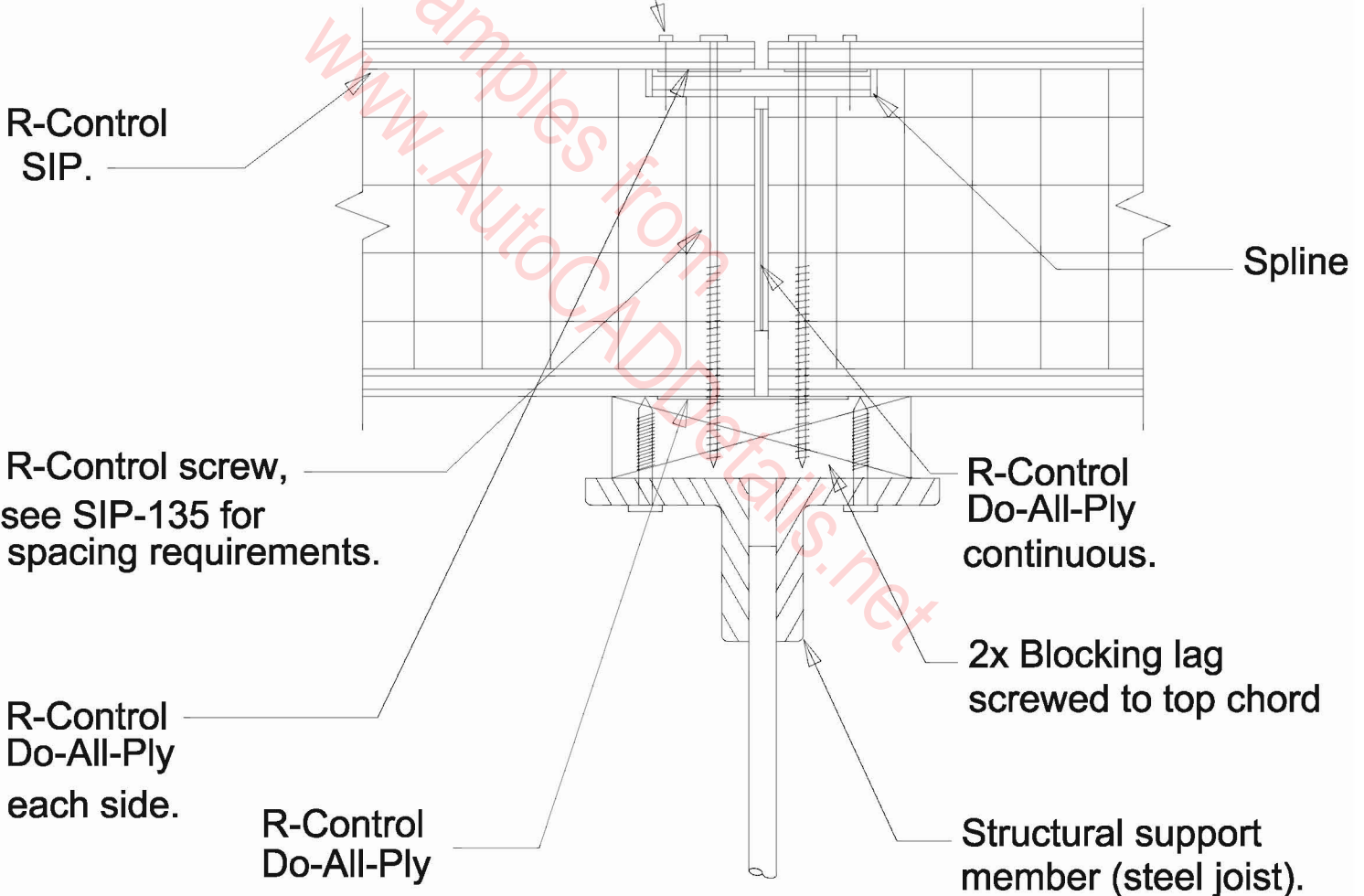
Surface Spline (Top)  
At Dimensional Lumber



Note: Refer to technical bulletin sip2031 for the limitations under which this detail can be used.

Note: Spline to be of material conforming to DOC PS2-92, min thickness equal to the panel skins.

Fasten with 8d nails or 14 ga. 1 1/2" staples @ 3" o.c. both sides of panel joint or equivalent. Top side of panel only.



## SECTION

Surface Spline (Top)  
At Steel Joist

Note: Refer to technical bulletin sip2031 for the limitations under which this detail can be used.

Note: Spline to be of material conforming to DOC PS2-92, min thickness equal to the panel skins.

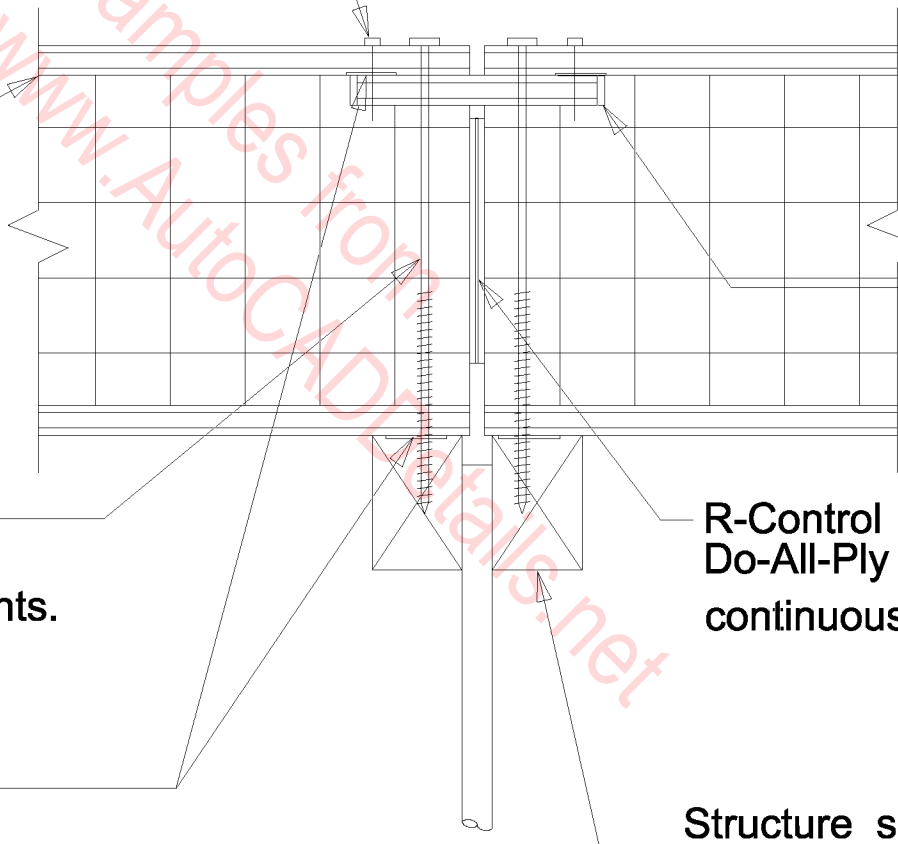
Fasten with 8d nails or 14 ga. 1 1/2" staples @ 3" o.c. both sides of panel joint or equivalent. Top side of panel only.

R-Control SIP.

R-Control screw, see SIP-135 for spacing requirements.

R-Control Do-All-Ply each side.

www.Samples from AutoCAD Details.net



Spline

R-Control Do-All-Ply continuous.

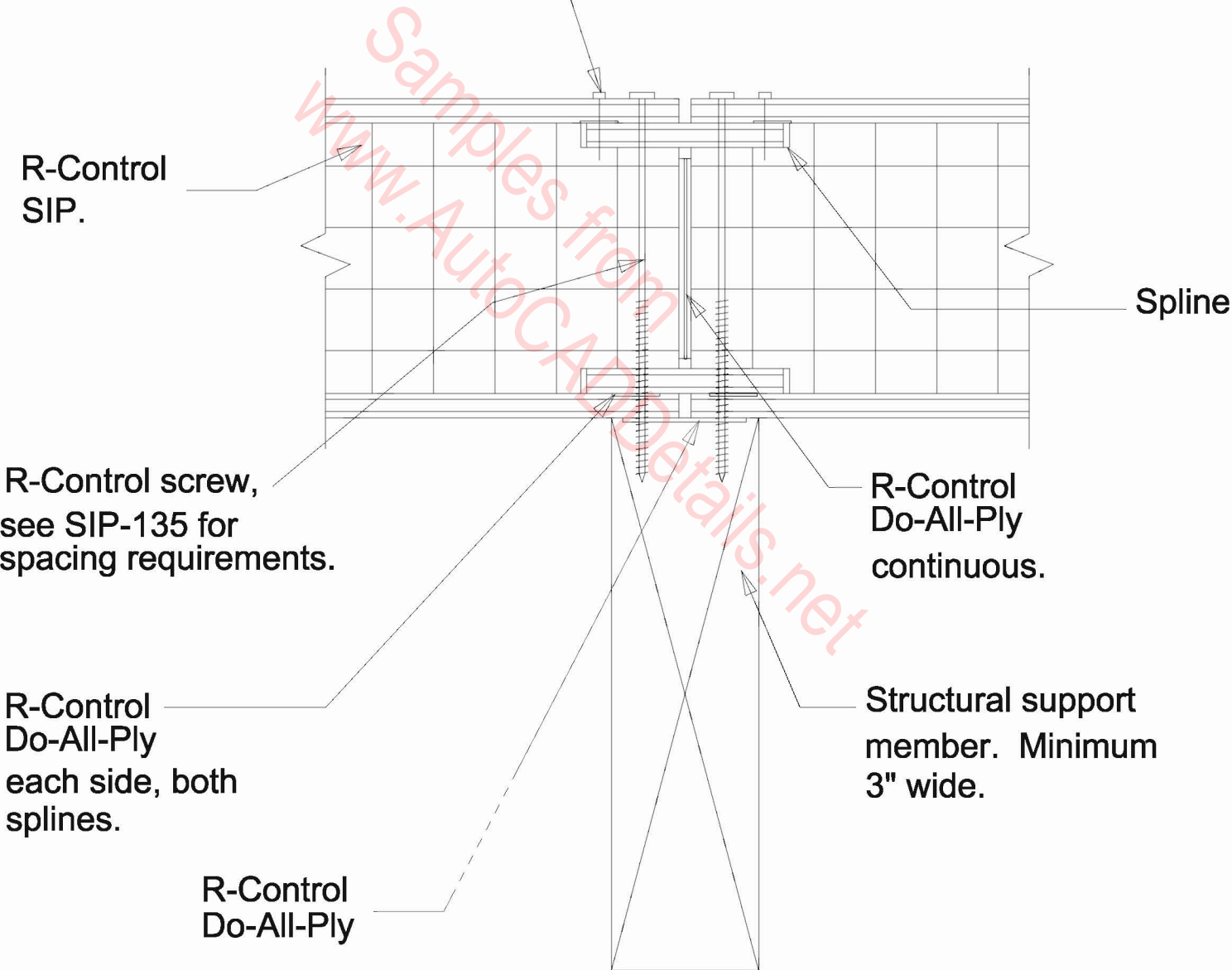
Structure support member with min 1 1/2" bearing for panels each side of joint.

## SECTION

Surface Spline (Top) @ Truss

Note: Spline to be of material conforming to DOC PS2-92, min thickness equal to the panel skins.

Fasten with 8d nails or 14 ga. 1 1/2" staples @ 3" o.c. both sides of panel joint or equivalent.



# SECTION

Surface Spline  
At Dimensional Lumber

Note: Spline to be of material conforming to DOC PS2-92, min thickness equal to the panel skins.

Fasten with 8d nails or 14 ga. 1 1/2" staples @ 3" o.c. both sides of panel joint or equivalent. Top side of panel only.

R-Control SIP.

Spline (see SIP-102)

R-Control screw, see SIP-135 for spacing requirements.

R-Control Do-All-Ply continuous.

R-Control Do-All-Ply each side, both splines.

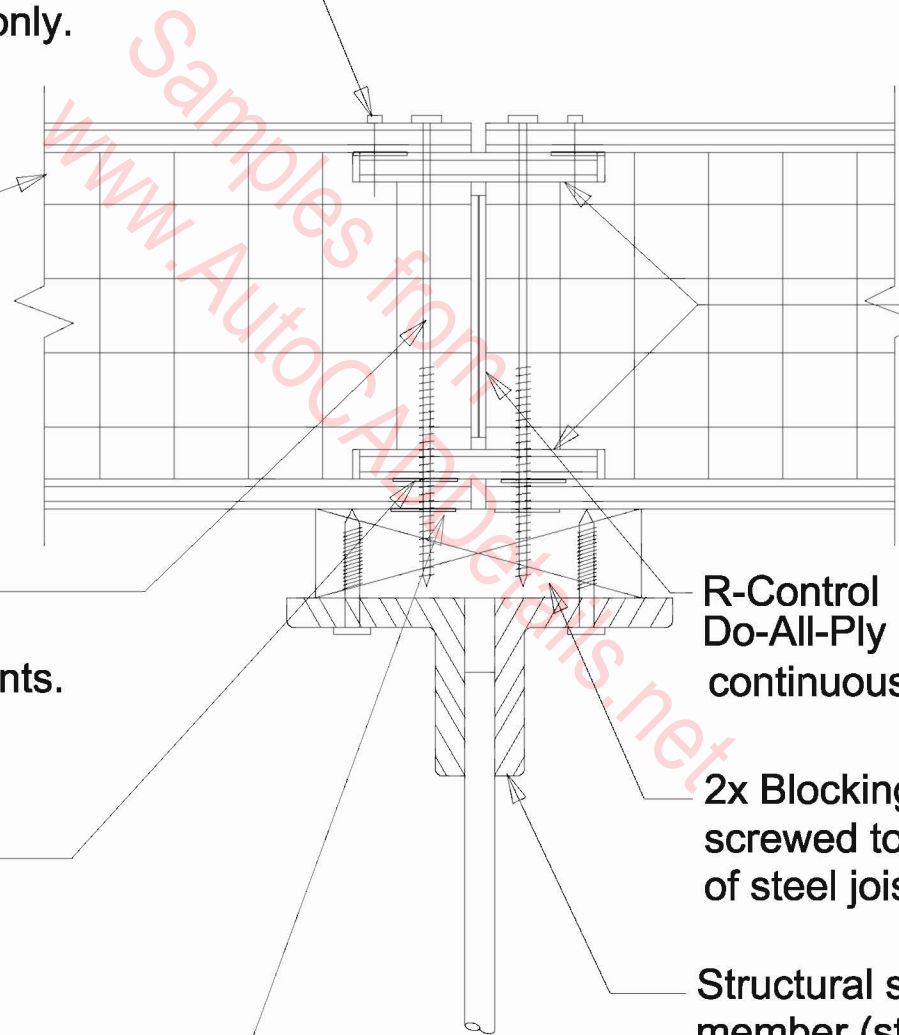
2x Blocking lag screwed to top chord of steel joist.

R-Control Do-All-Ply each side.

Structural support member (steel joist).

## SECTION

Surface Spline  
At Steel Joist



Note: Spline to be of material conforming to DOC PS2-92, min thickness equal to the panel skins.

Fasten with 8d nails or 14 ga. 1 1/2" staples @ 3" o.c. both sides of panel joint or equivalent. Top side of panel only.

R-Control SIP

Spline (see SIP-102)

Minimum #10 deck screws @ 8" o.c., each side of joint or as req'd by engineer. Pre-drill flange for screw application.

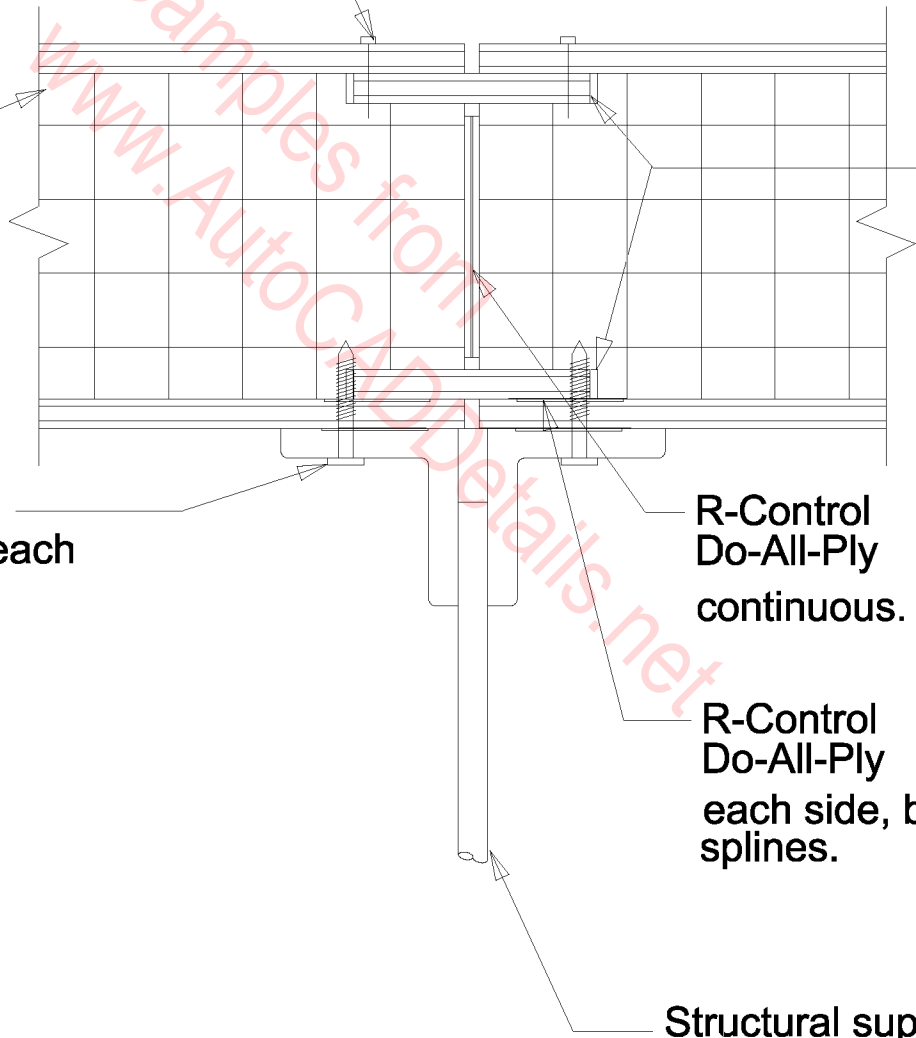
R-Control Do-All-Ply continuous.

R-Control Do-All-Ply each side, both splines.

Structural support member (steel joist).

## SECTION

Surface Spline  
At Steel Joist



Note: Spline to be of material conforming to APA PRP-108, min thickness equal to the panel skins.

Fasten with 8d nails or 14 ga. 1 1/2" staples @ 3" o.c. both sides of panel joint or equivalent. Top side of panel only.

R-Control SIP.

Spline (See SIP-102)

R-Control screw, see SIP-135 for spacing requirements.

R-Control Do-All-Ply continuous.

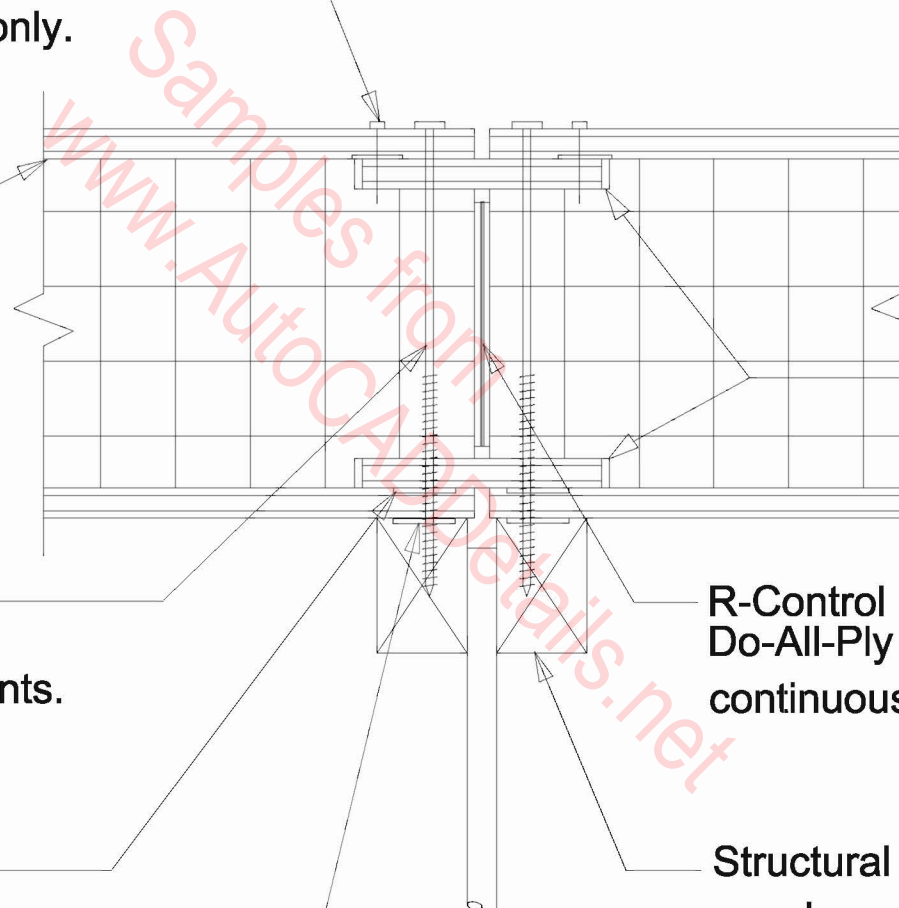
R-Control Do-All-Ply each side, both splines.

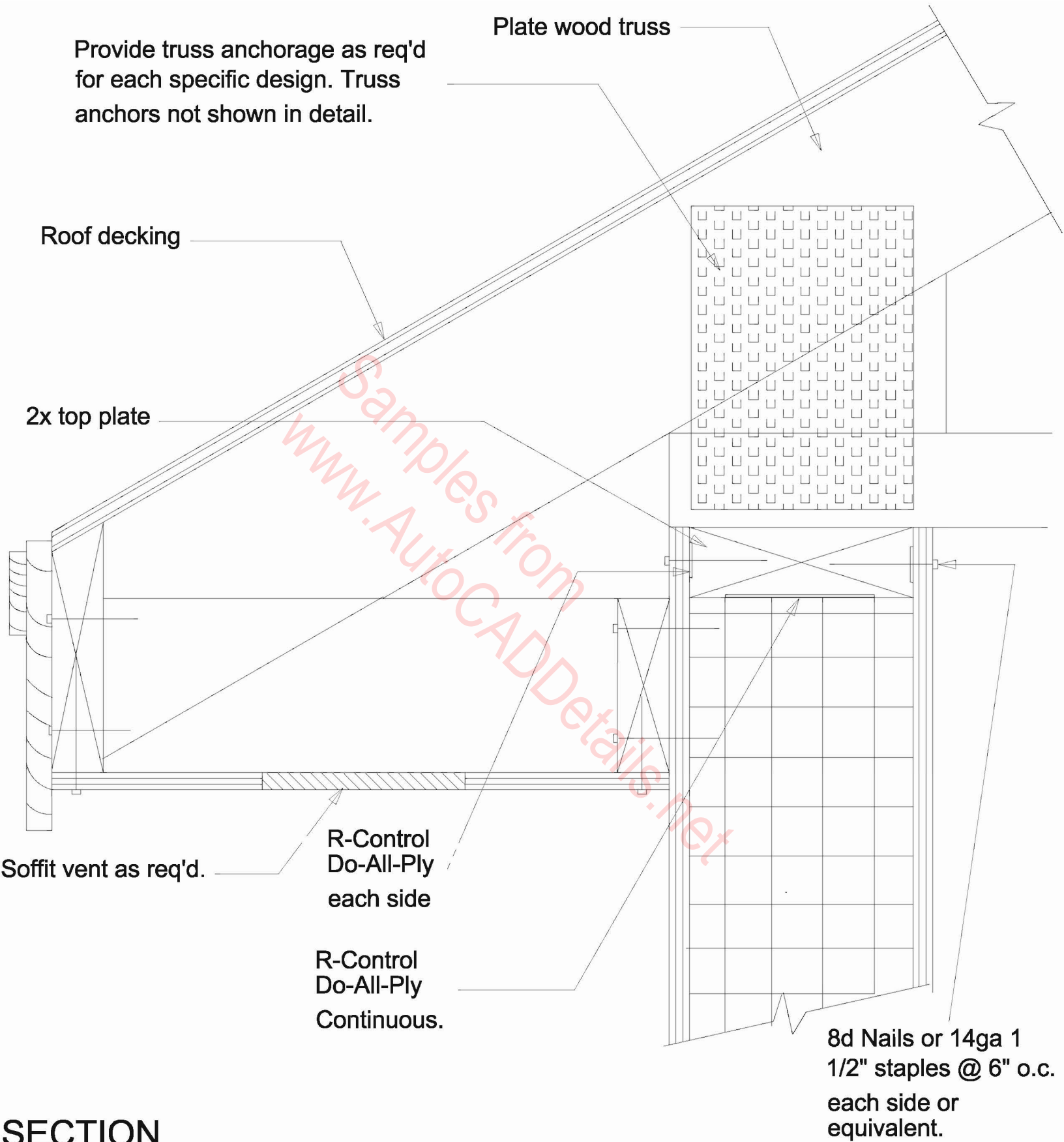
Structural support member with min 1 1/2" bearing for panels each side of joint.

R-Control Do-All-Ply each side.

## SECTION

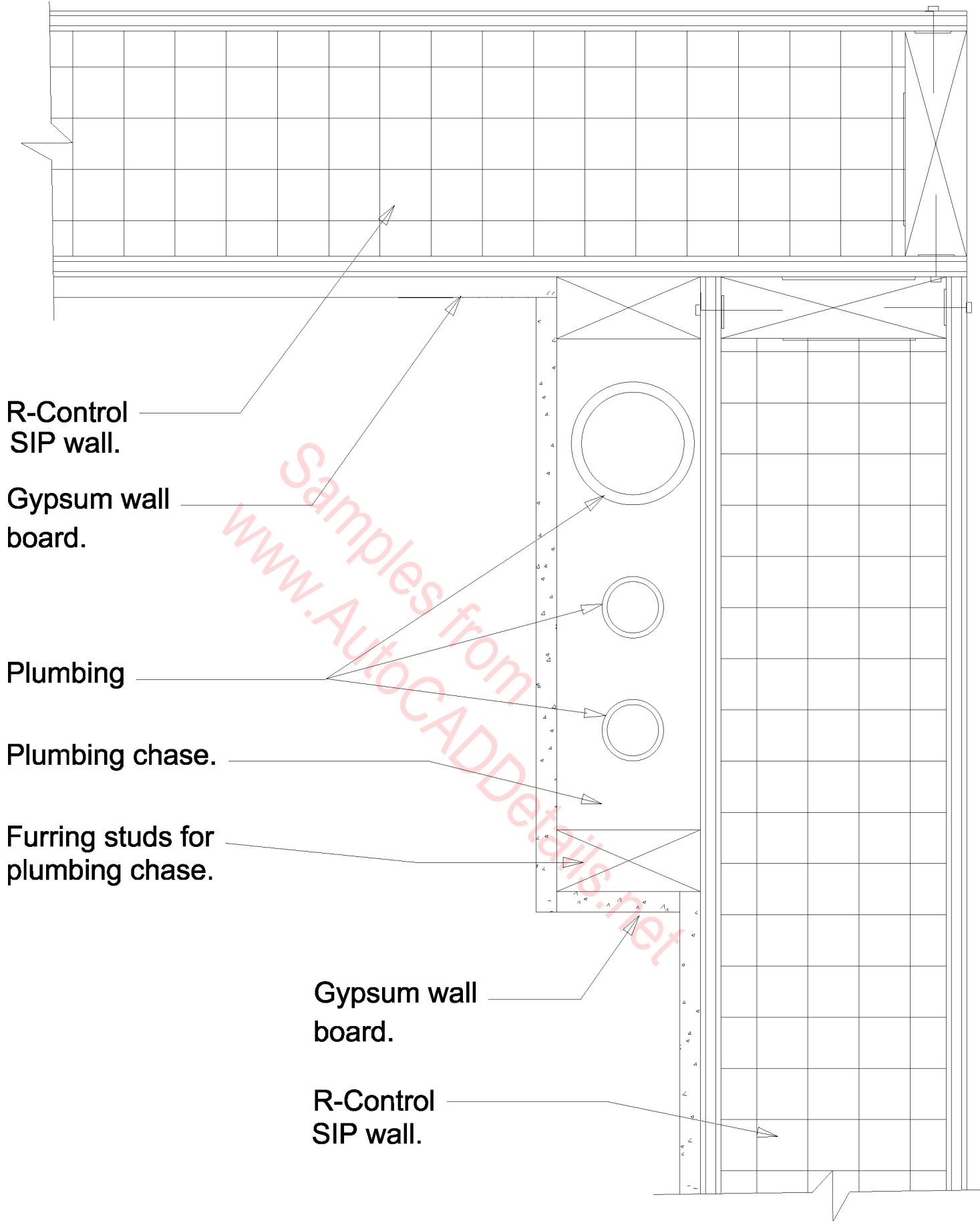
Surface Spline @ Truss





**SECTION**

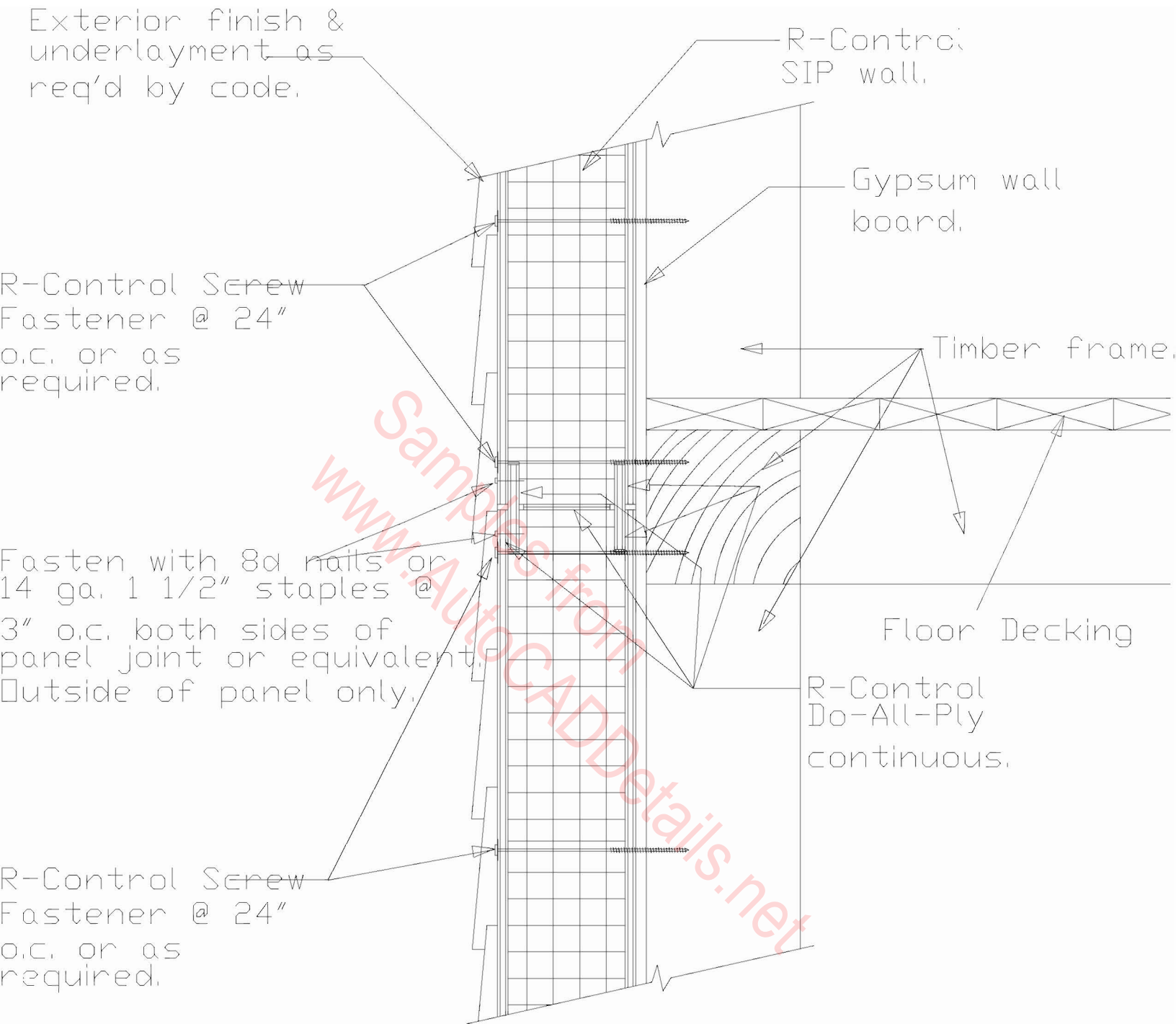
**Truss Bearing on Wall Panel**



PLAN

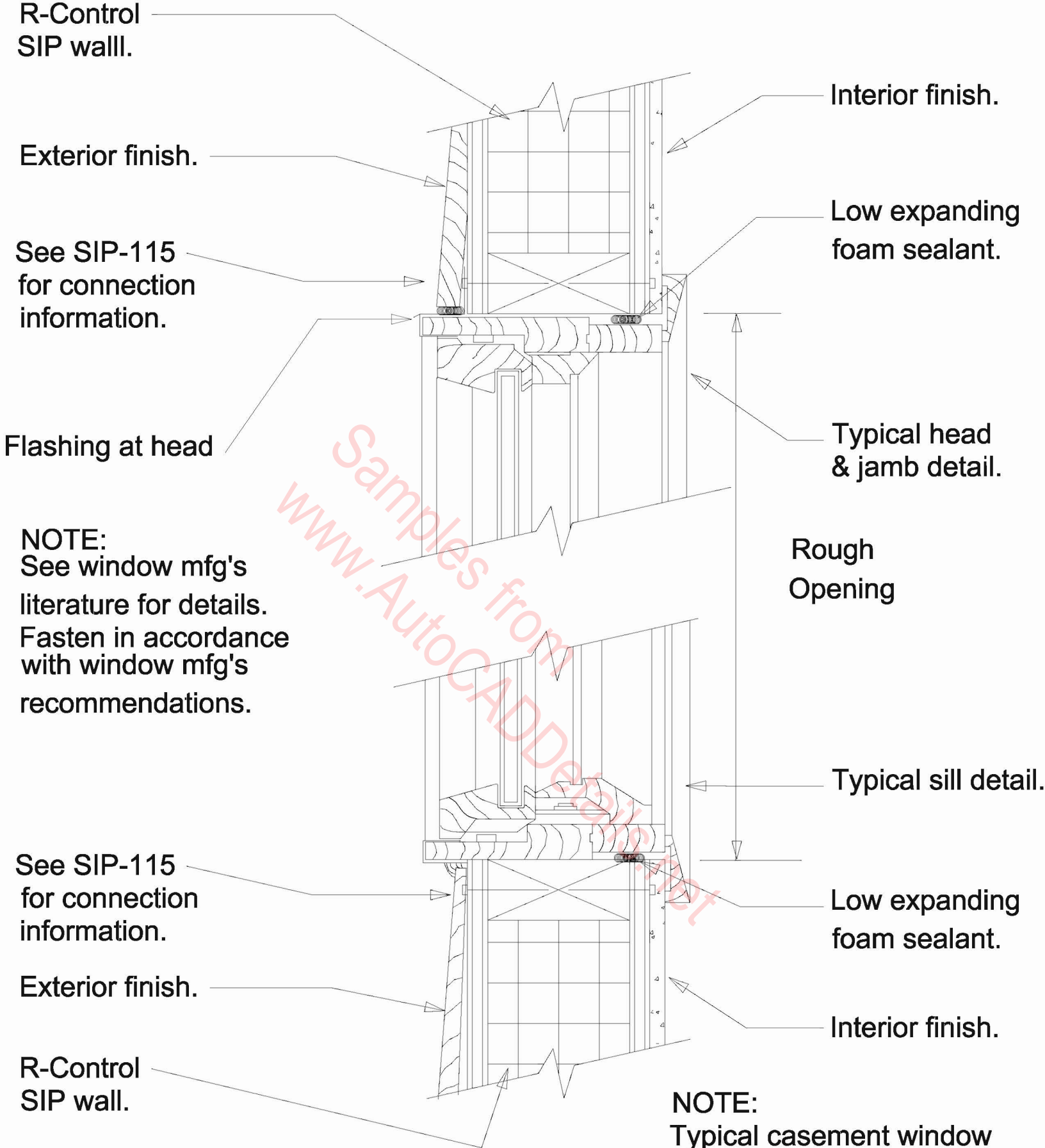
Wall Chase





SECTION

Wall Panel at Timber Frame Floor



**SECTION**

**Window Detail**