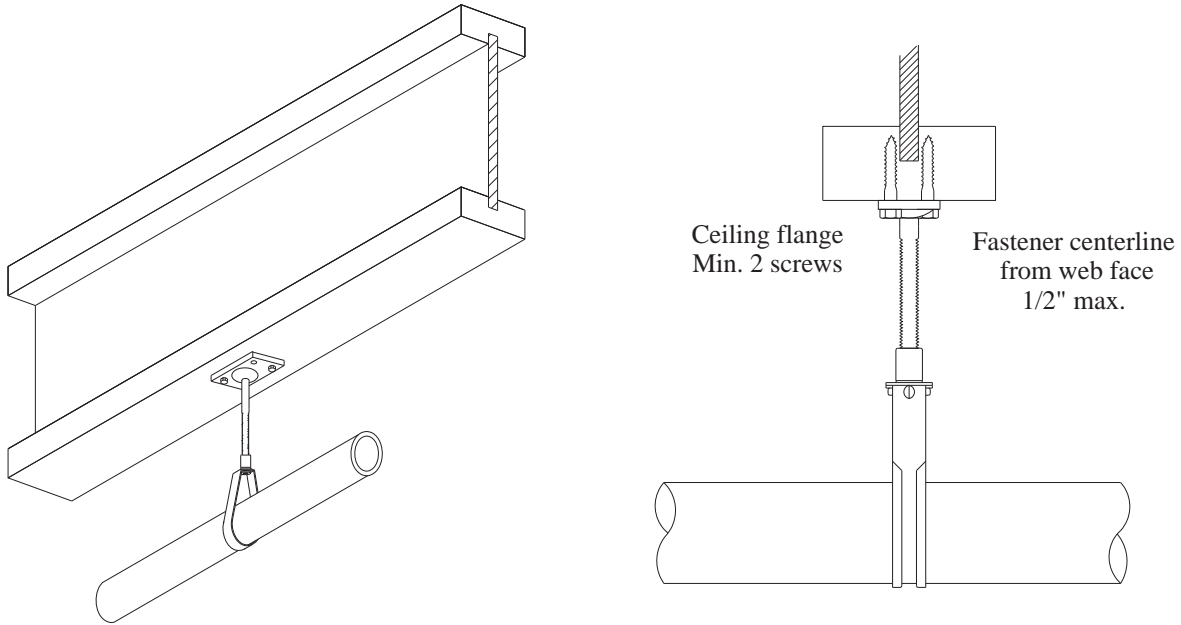


**Details provided by Kraig Kirschner, Principle
Technical Committee Member National Fire Protection
Association (NFPA) 13, Standard for the Installation of
Sprinkler Systems; Hanging and Bracing**

**Note: When CPVC sprinkler systems are used, it is the
responsibility of the designer to ensure the pipe and
fittings are listed by a listing agency for I-joist systems in
accordance with NFPA 13.**

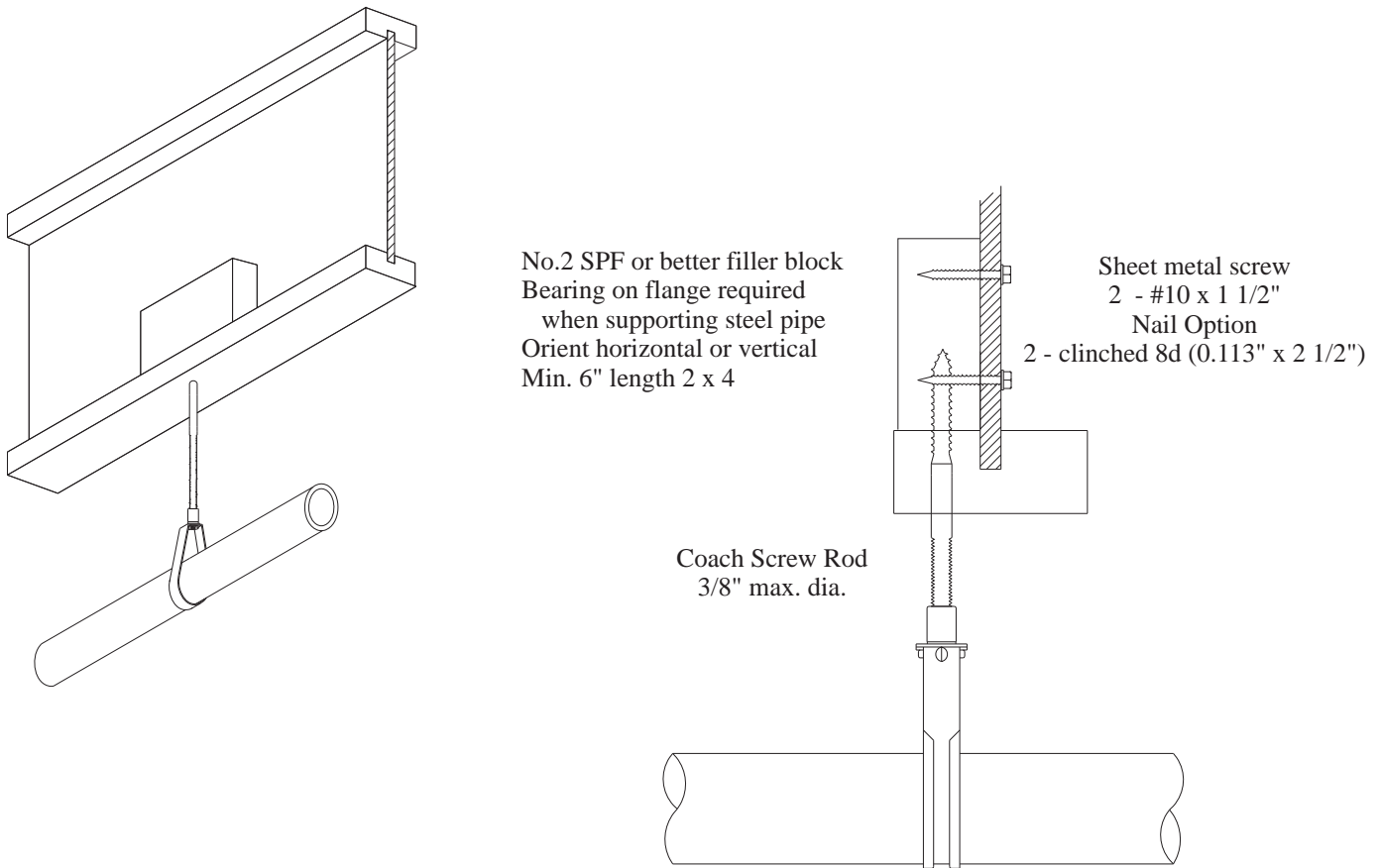
FIGURE 1
APA PERFORMANCE RATED I-JOIST
CEILING FLANGE HANGER



Install per NFPA 13 and manufacturer's instructions

Steel sprinkler system pipe
4" Max. dia. or 500# max. point load

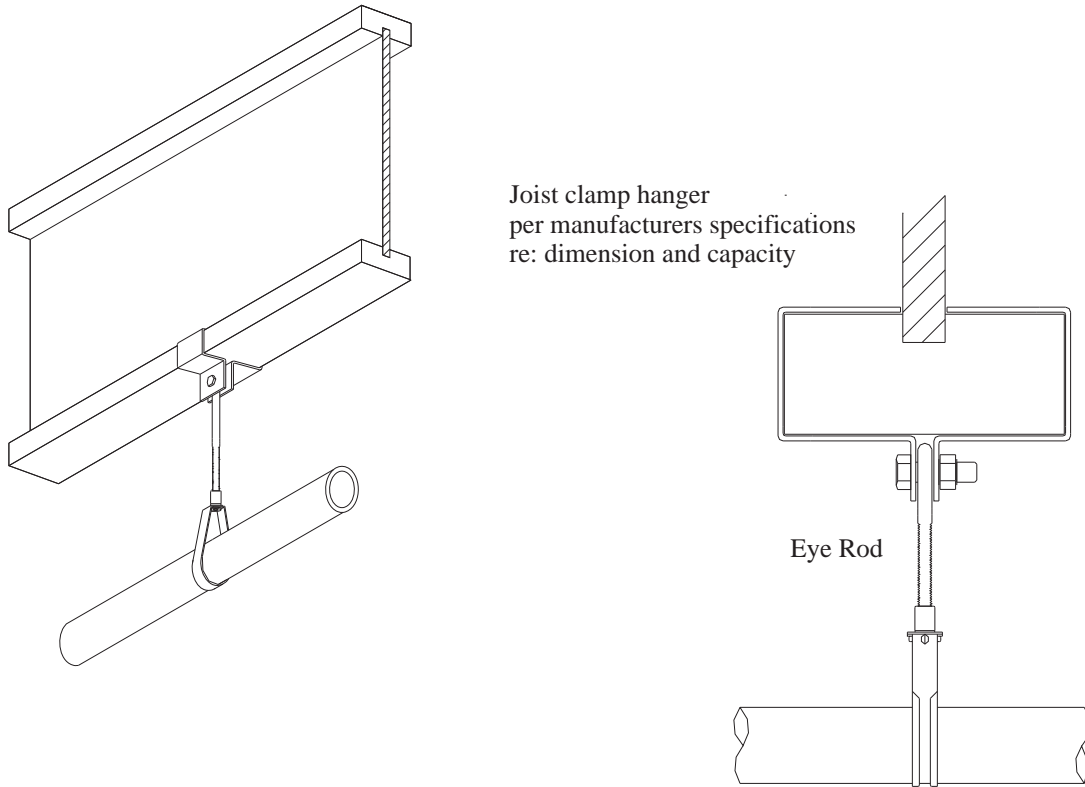
Figure 2
APA PERFORMANCE RATED I-JOIST
COACH SCREW HANGER



Install per NFPA 13

Steel sprinkler system pipe
 4" Max. dia. or 500# max. point load

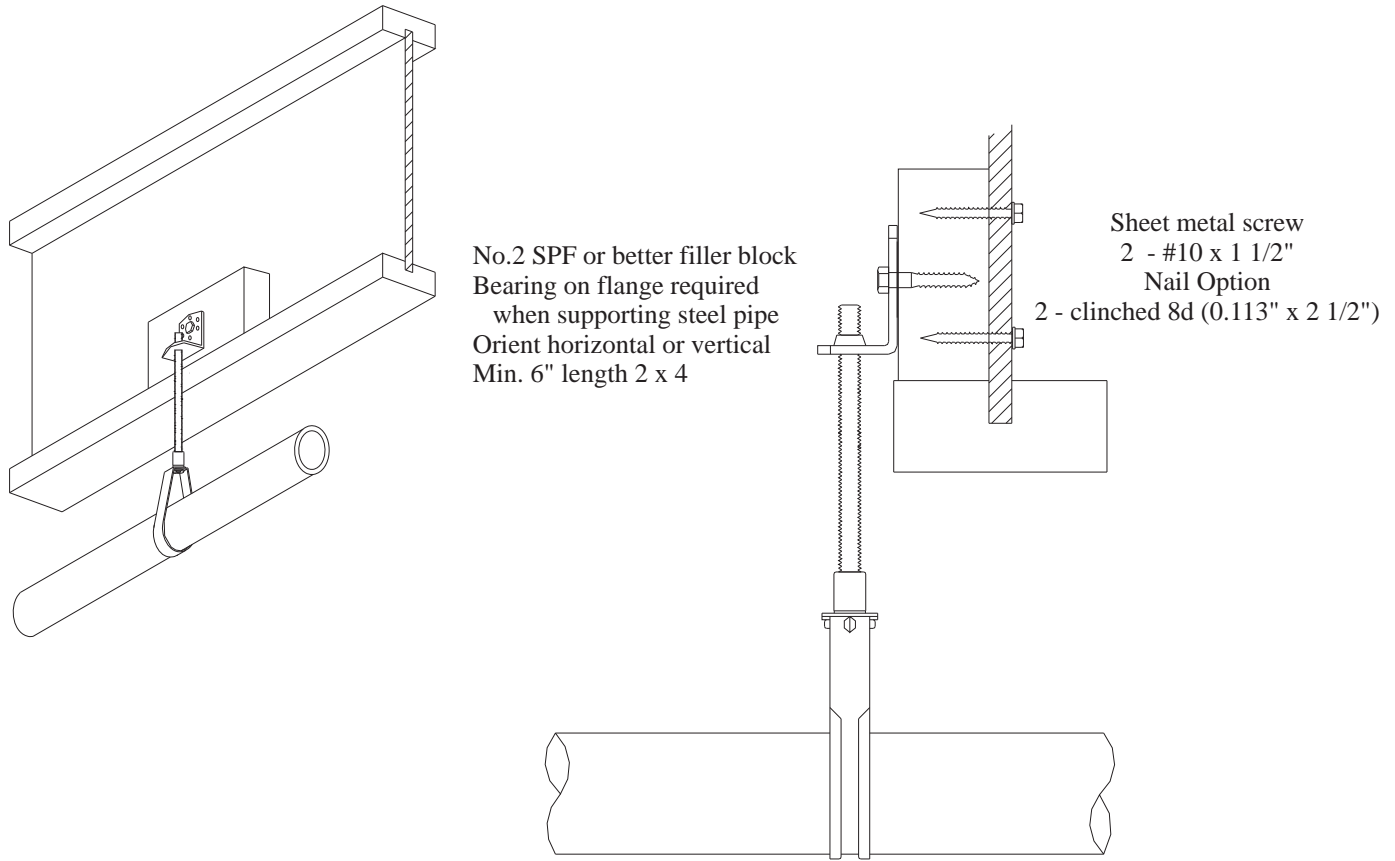
Figure 3
APA PERFORMANCE RATED I-Joist
JOIST CLAMP HANGER



Install per NFPA 13 and manufacturer's instructions

Steel sprinkler system pipe
4" Max. dia. or 500# max. point load

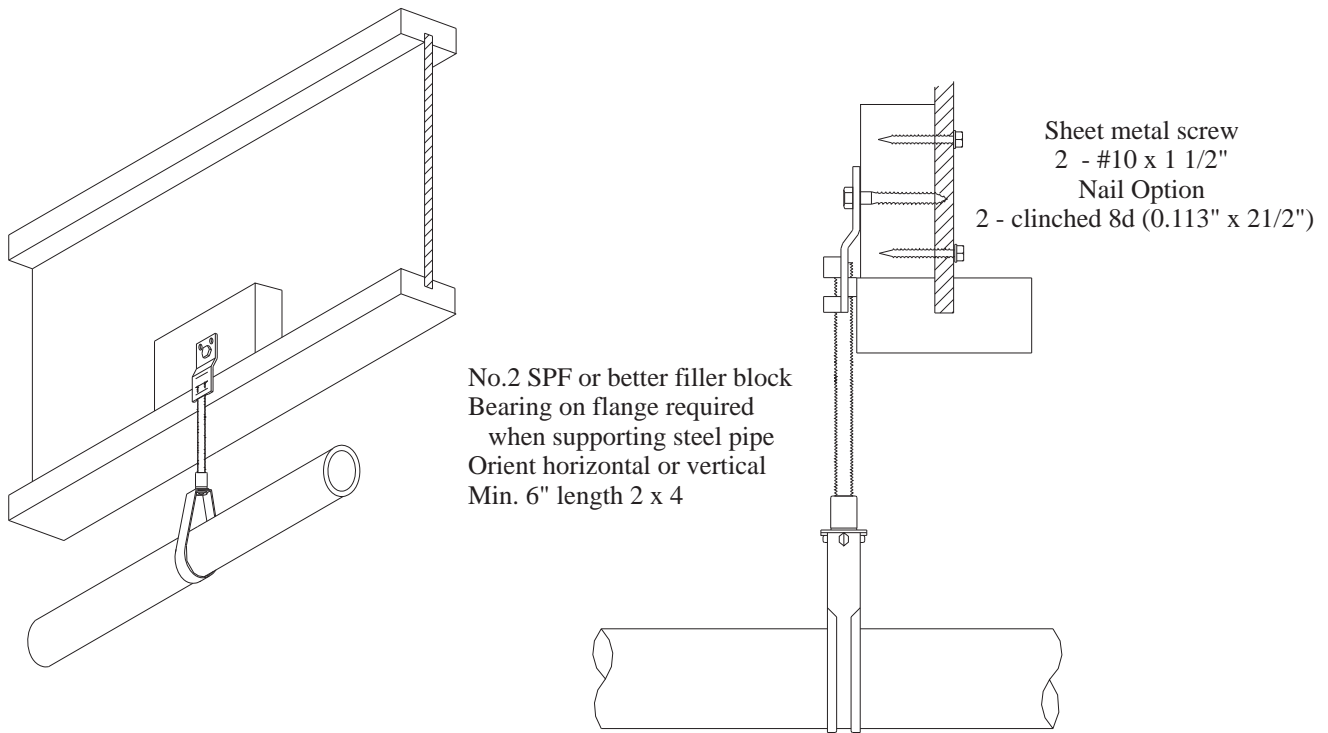
FIGURE 4
APA PERFORMANCE RATED I-JOIST
ANGLE BRACKET HANGER



Install per NFPA 13 and manufacturer's instructions

Steel sprinkler system pipe
4" Max. dia. or 500# max. point load

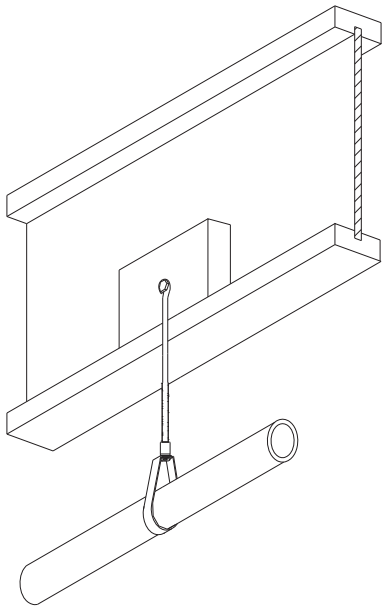
Figure 5
APA PERFORMANCE RATED I-JOIST
OFFSET EYE-SOCKET HANGER



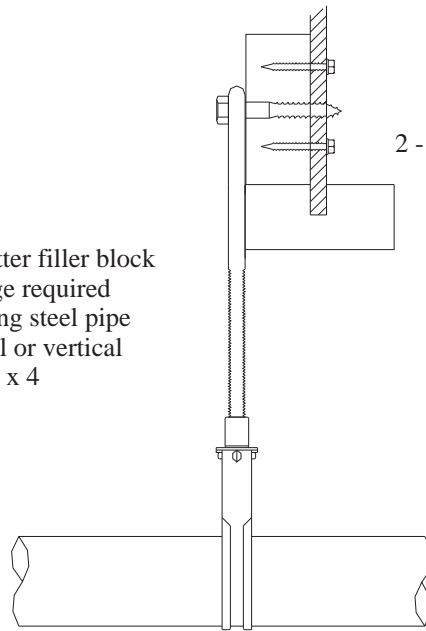
Install per NFPA 13 and manufacturer's instructions

Steel sprinkler system pipe
4" Max. dia. or 500# max. point load

FIGURE 6
APA PERFORMANCE RATED I-JOIST
EYE ROD HANGER



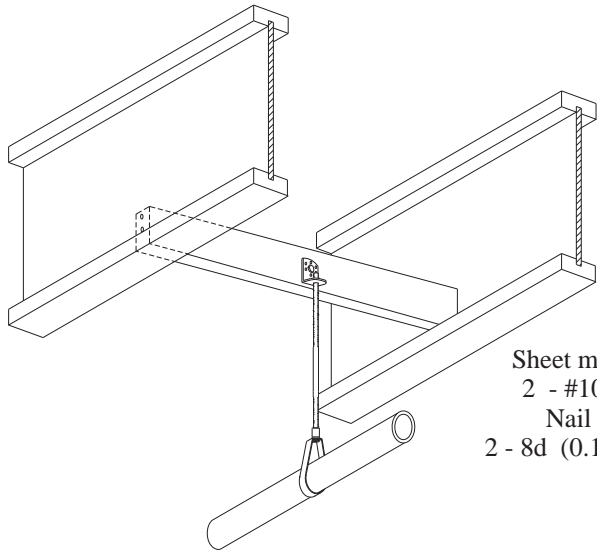
No. 2 SPF or better filler block
Bearing on flange required
when supporting steel pipe
Orient horizontal or vertical
Min. 6" length 2 x 4



Sheet metal screw
2 - #10 x 1 1/2"
Nail Option
2 - clinched 8d (0.113"x 2 1/2")

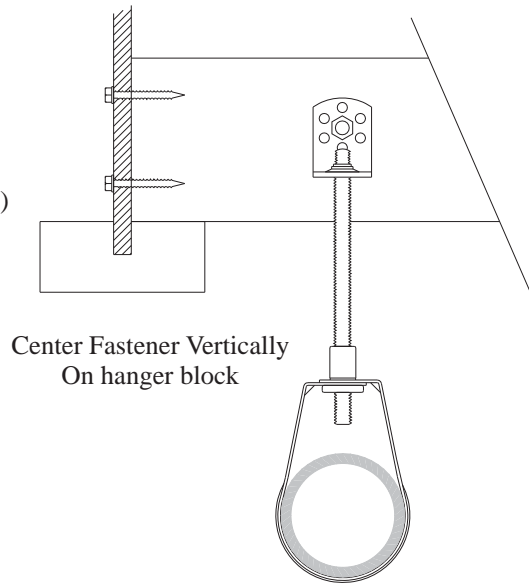
Install per NFPA 13
Steel sprinkler system pipe
4" Max. dia. or 500# max. point load

FIGURE 7
APA PERFORMANCE RATED I-JOIST
LOAD CARRIED BY FLANGES



Sheet metal screw
2 - #10 x 1 1/2"
Nail Option
2 - 8d (0.113" x 2 1/2")

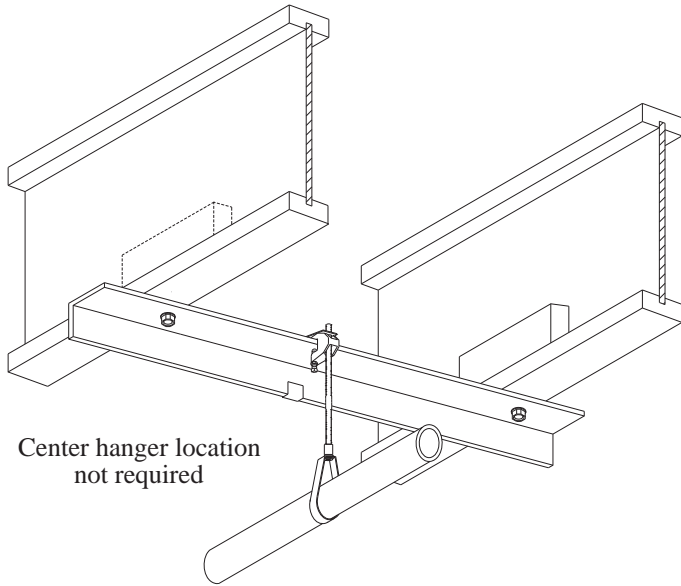
No. 2 SPF or better hanger block
Bearing on flange required when supporting steel pipe
Install - 48" max. length 2x4 for 3" max. dia. = 475# max. point load
Install - 48" max. length 2x6 for 5" max. dia. = 600# max. Point load



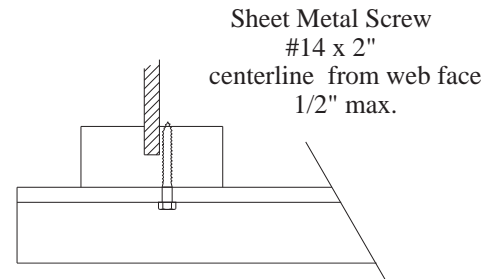
Install per NFPA 13 and manufacturer's instructions

Steel sprinkler system pipe
see note above

FIGURE 8
APA PERFORMANCE RATED I-JOIST
NFPA 13 STEEL ANGLE TRAPEZE WITH HANGER



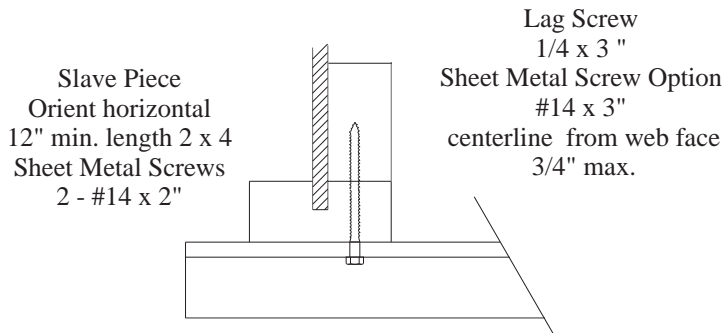
Install 48" max. length NFPA 13 trapeze angle iron



Install per NFPA 13

CPVC sprinkler system pipe

2 1/2" Max. dia. = 290# max. Point load



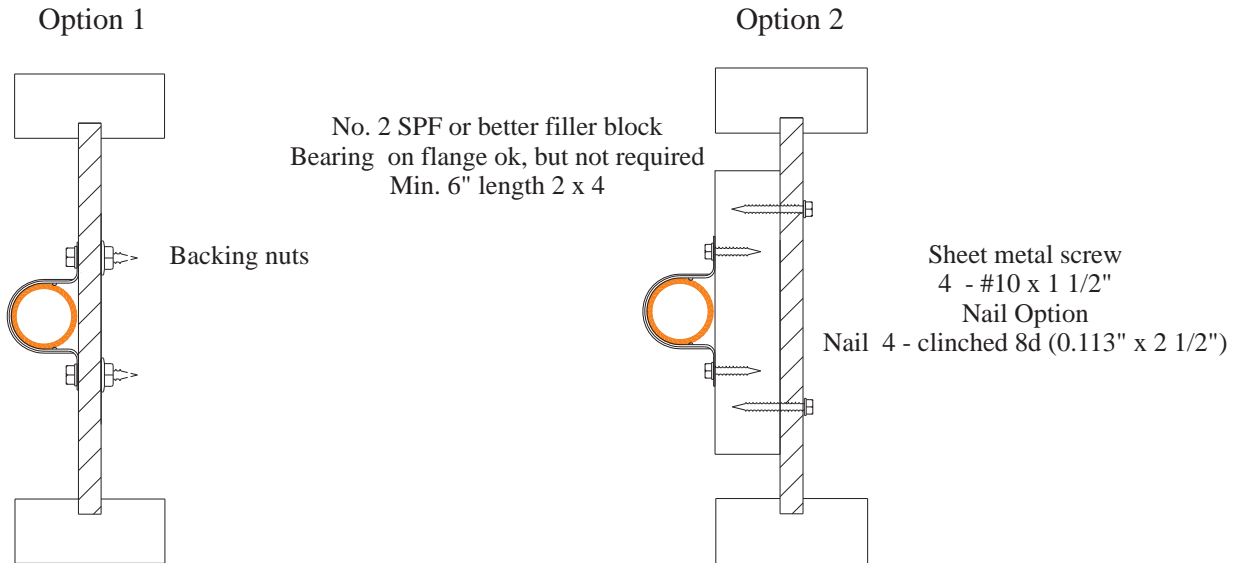
Install per NFPA 13

Steel sprinkler system pipe

4" Max. dia. = 500# max. point load

FIGURE 9

APA PERFORMANCE RATED I-JOIST
CPVC HANGER - SURFACE MOUNT



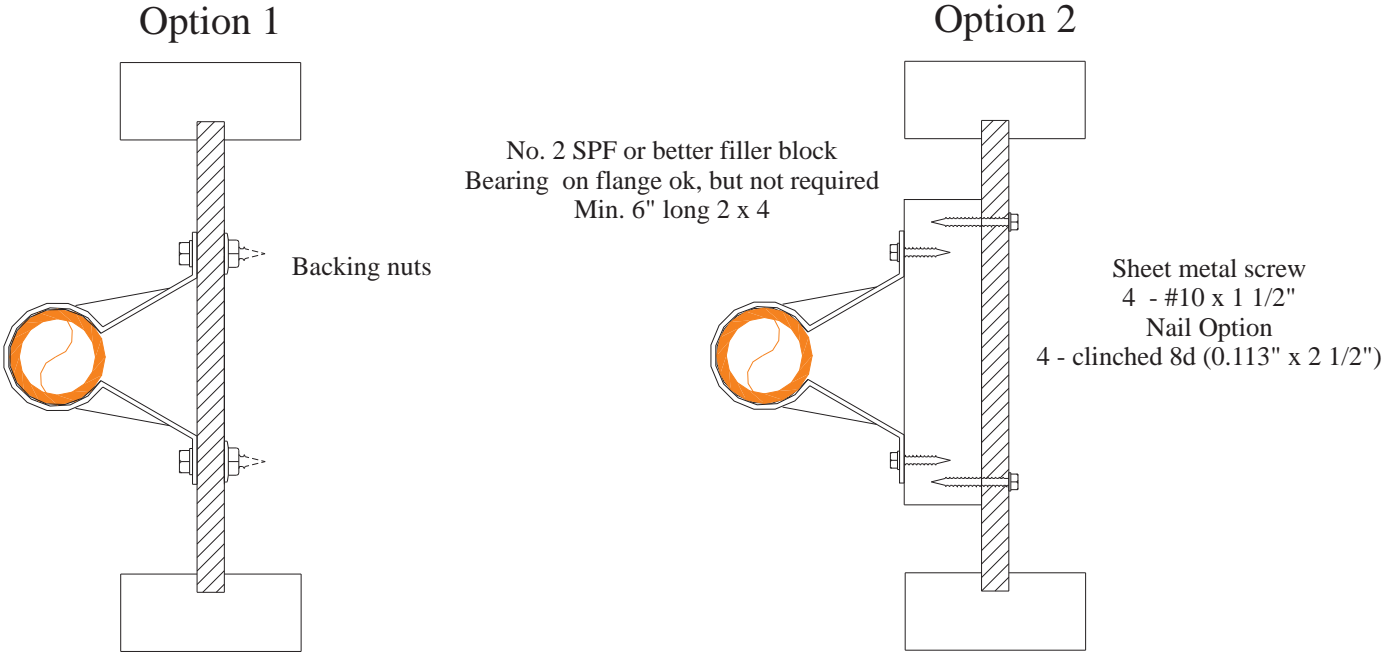
Install per NFPA 13 and manufacturer's instructions

CPVC sprinkler system pipe
3" Max. dia. or 310# max. point load

FIGURE 10

APA PERFORMANCE RATED I-JOIST

CPVC HANGER - OFFSET

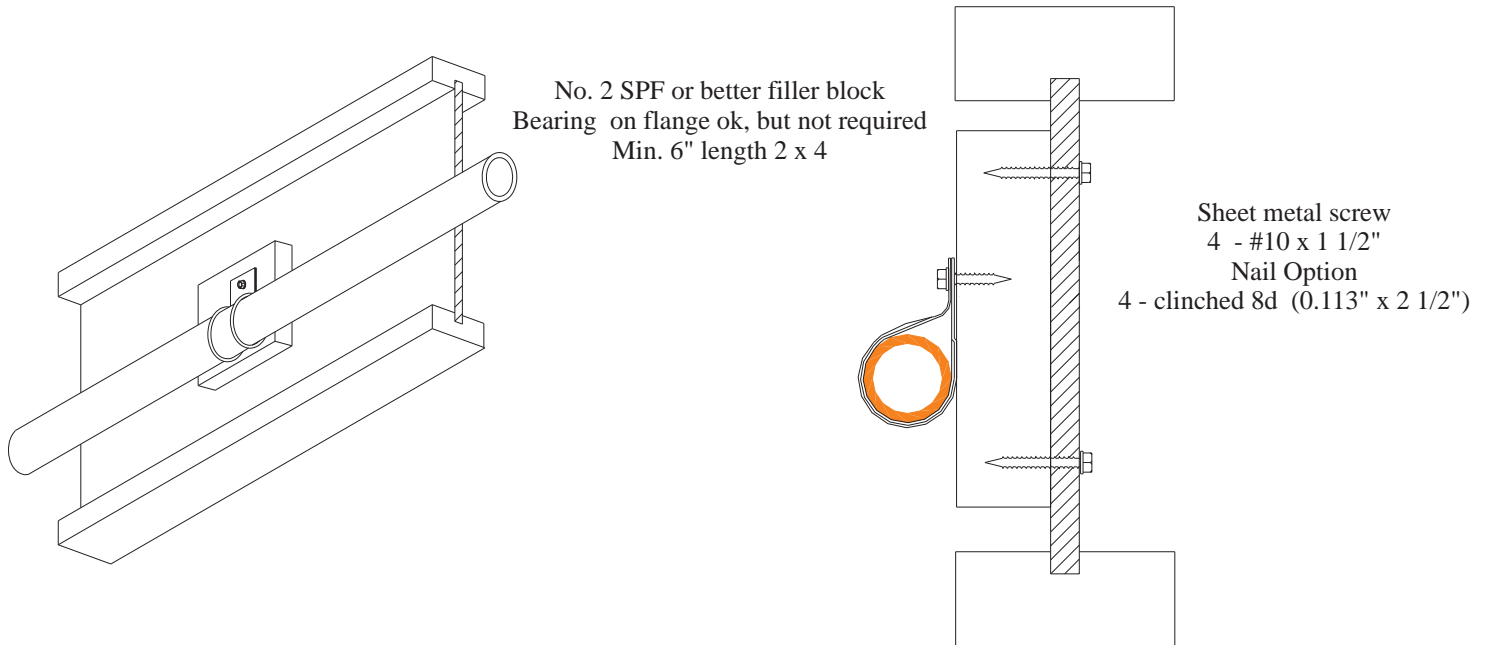


Install per NFPA 13 and manufacturer's instructions

CPVC sprinkler system pipe
3" Max. dia. or 310# max. point load

FIGURE 11

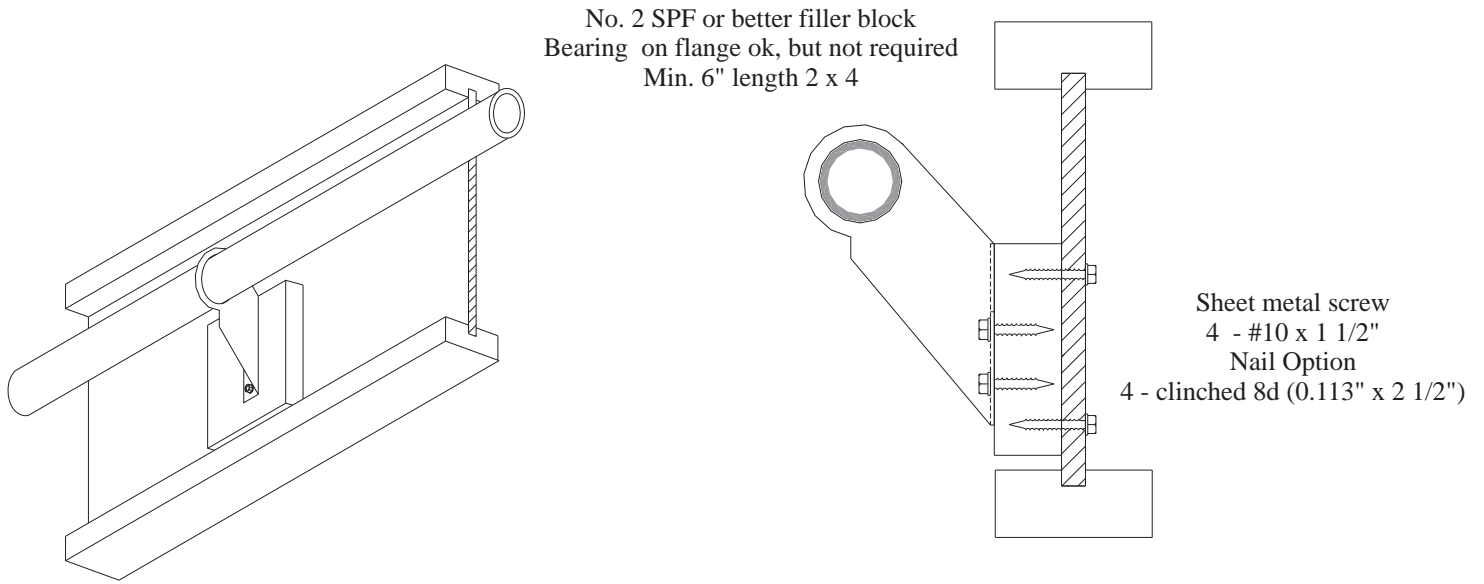
**APA PERFORMANCE RATED I-JOIST
CPVC HANGER - SURFACE MOUNT**



Install per NFPA 13 and manufacturer's instructions

CPVC sprinkler system pipe
3" Max. dia. or 310# max. point load

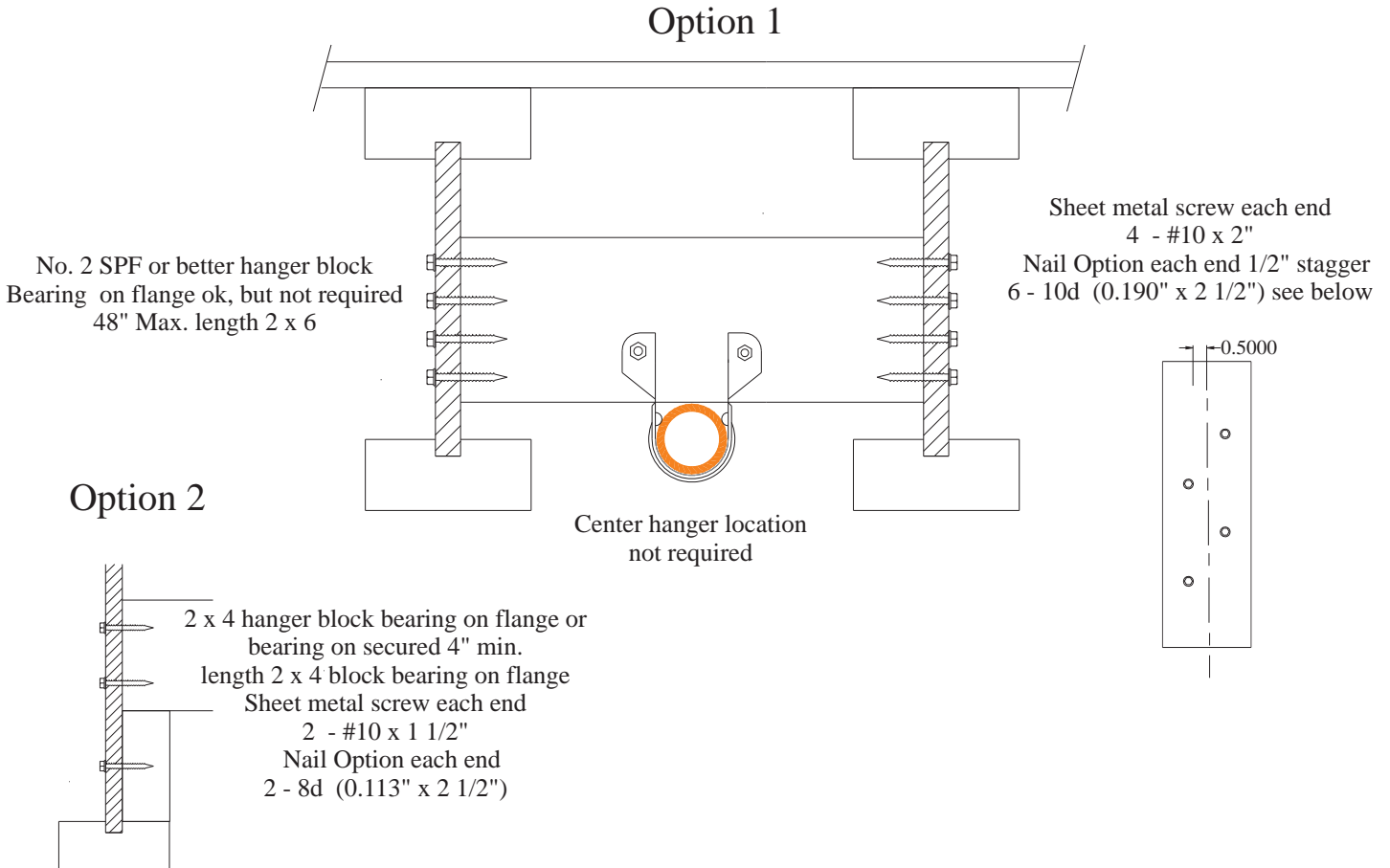
FIGURE 12
APA PERFORMANCE RATED I-JOIST
CPVC HANGER - DOUBLE OFFSET



Install per NFPA 13 and manufacturer's instructions

CPVC sprinkler system pipe
3" Max. dia. or 310# max. point load

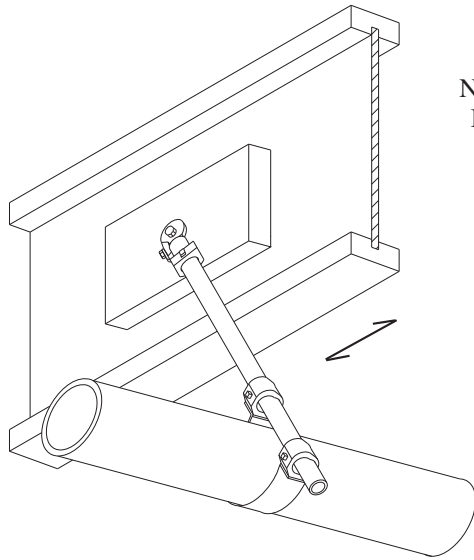
FIGURE 13
APA PERFORMANCE RATED I-JOIST
CPVC HANGER - FACE MOUNT



Install per NFPA 13 and manufacturer's instructions

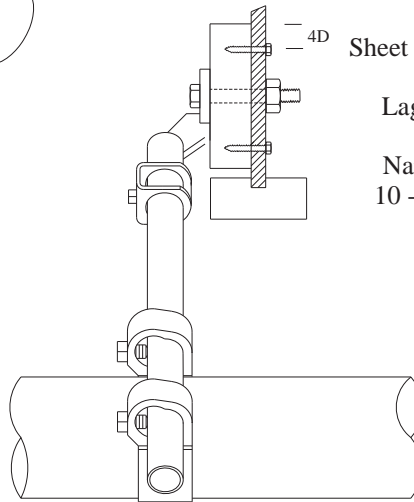
CPVC sprinkler system pipe
 3" Max. dia. or 310# max. point load

FIGURE 14 - Option 1
APA PERFORMANCE RATED I-JOIST
SWAY BRACE BLOCKING FOR SEISMIC LOADS
PARALLEL TO THE JOIST



No. 2 SPF or better filler and slave block
 Bearing on flange ok, but not required
 Install both sides
 Min. 12" long 2 x 6

Blocking on one side of web

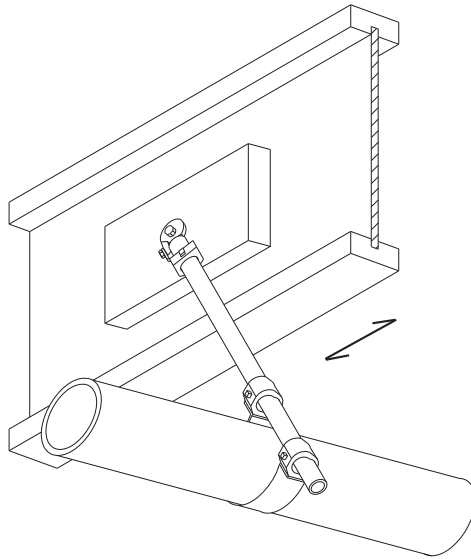


Sheet metal screw thru web into block
 8 - #10 x 1 1/2"
 Lag Option thru web into block
 8 - 1/4" x 1 1/2"
 Nail Option thru web into block
 10 - clinched 8d (0.113" x 2 1/2")

Install per NFPA 13 and manufacturer's instructions

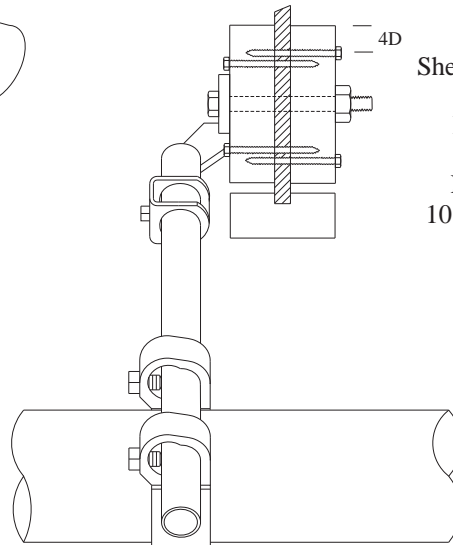
Max. horizontal load = 650#
 includes a 1.33 duration of load adjustment

FIGURE 14 - Option 2
APA PERFORMANCE RATED I-JOIST
SWAY BRACE BLOCKING FOR SEISMIC LOADS
PARALLEL TO THE JOIST



No. 2 SPF or better filler and slave block
 Bearing on flange ok, but not required
 Install both sides
 Min. 12" long 2 x 6

Blocking on both sides of web

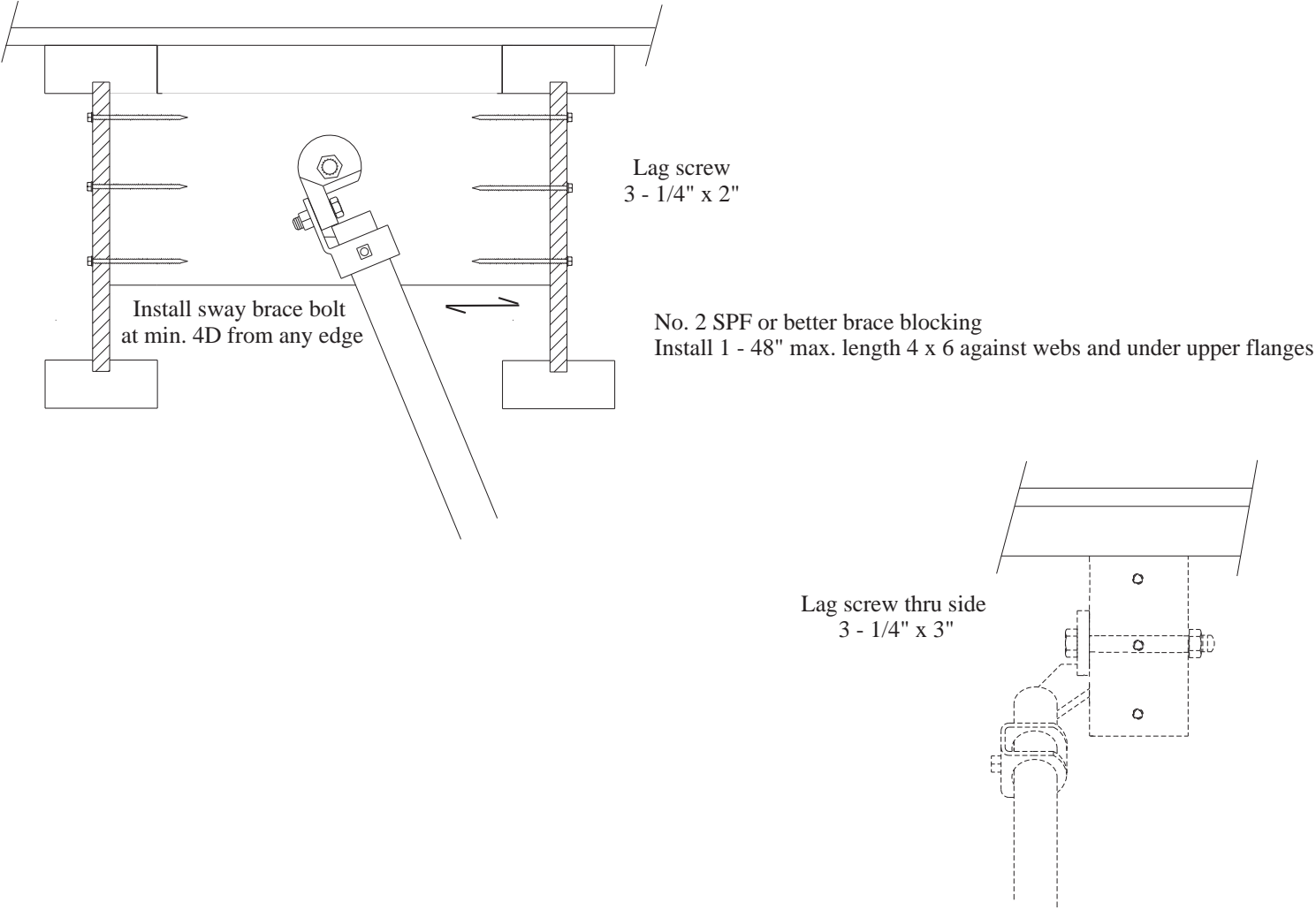


Sheet metal screw each side
 8 - #14 x 3"
 Lag Option each side
 8 - 1/4" x 3"
 Nail Option each side
 10 - 12d (0.128" x 3 1/4")

Install per NFPA 13 and manufacturer's instructions

Max. horizontal load = 1000#
 includes a 1.33 duration of load adjustment

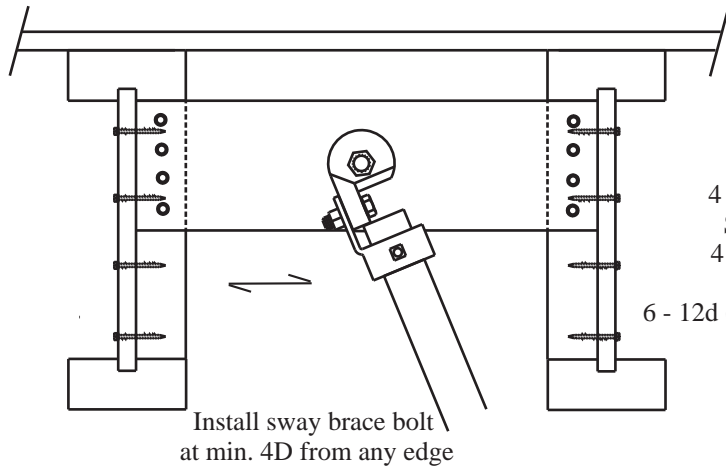
FIGURE 15
APA PERFORMANCE RATED I-JOIST
SWAY BRACE BLOCKING FOR SEISMIC LOADS
PERPENDICULAR TO THE JOIST



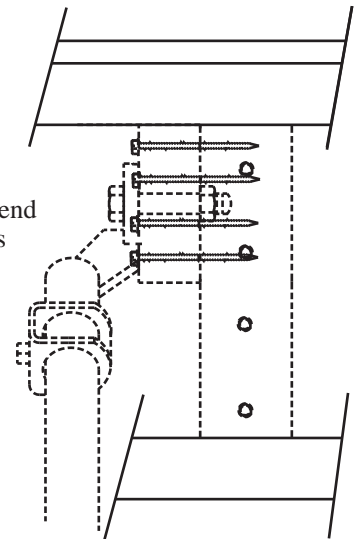
Install per NFPA 13 and manufacturer's instructions

Max. horizontal load = 585#
 includes a 1.33 duration of load adjustment

FIGURE 16
APA PERFORMANCE RATED I-JOIST
SWAY BRACE BLOCKING FOR SEISMIC LOADS
PERPENDICULAR TO THE JOIST



Cross Member
 Lag Screws
 4 - 1/4" x 3" each end
 Sheet Metal Screw
 4 - #14 x 3" each end
 Nail Option
 6 - 12d (0.128" x 3 1/4") each end



Web Blocking
 Lag Screws
 4 - 1/4" x 1 1/2" each end
 Sheet Metal Screws
 4 - #14 x 1 1/2"

No.2 SPF or better brace blocking
 Install 1 - full length vertical 2 x 4 flat on each web between top and bottom flanges
 Install 1 - 48" max. length horizontal 2 x 6 against webs and under upper flanges

Install per NFPA 13 and manufacturer's instructions

Max. horizontal load = 515#
 includes a 1.33 duration of load adjustment

FIGURE 17
APA PERFORMANCE RATED I-JOIST
SWAY BRACE BLOCKING FOR SEISMIC LOADS
PERPENDICULAR TO THE JOIST

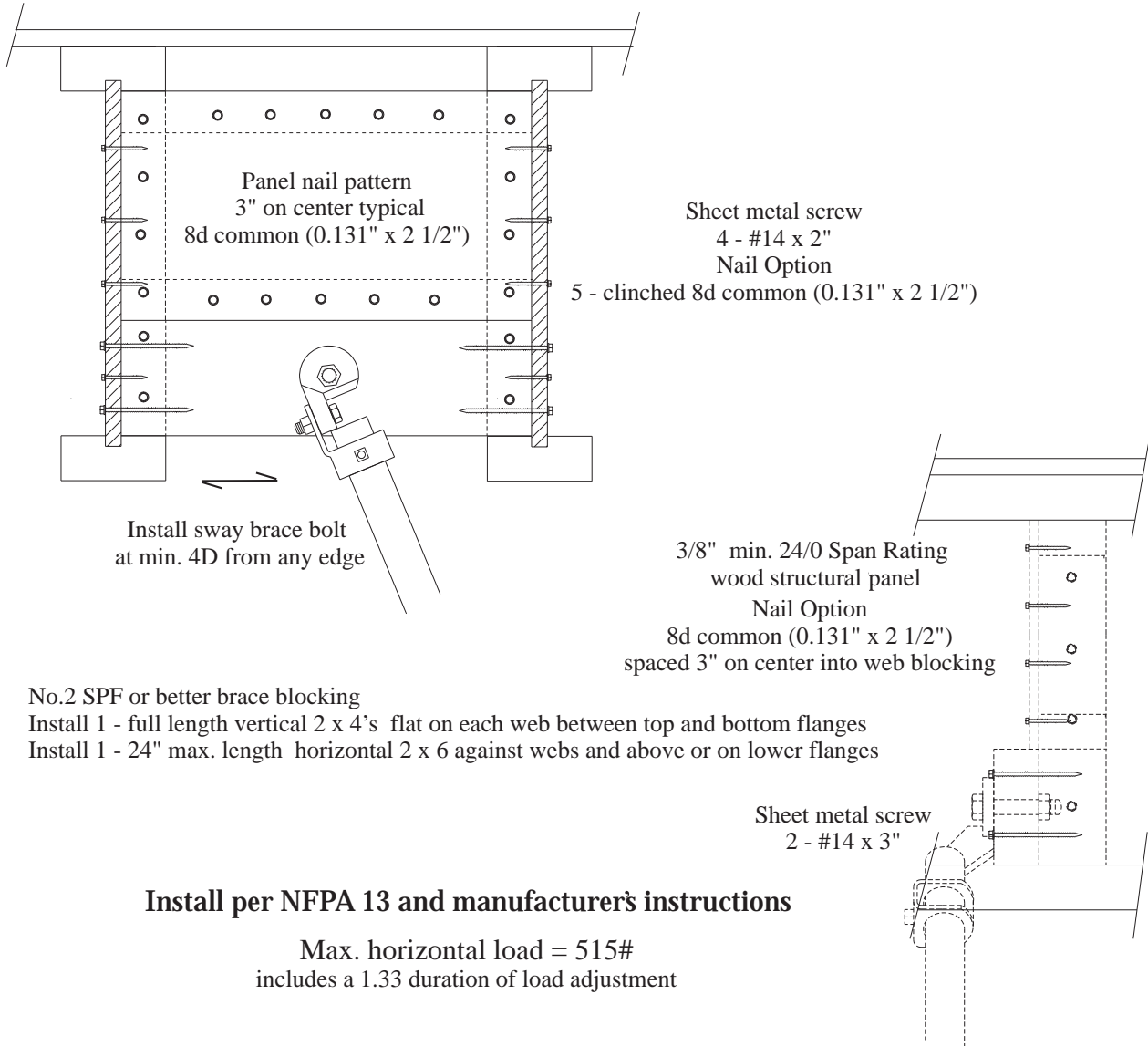
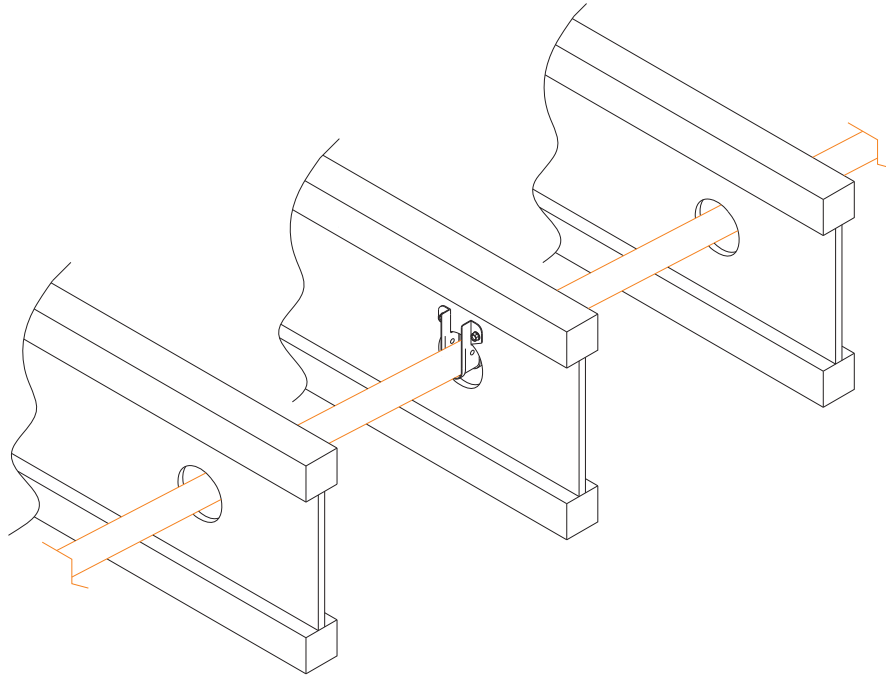


FIGURE 18
APA PERFORMANCE RATED I-JOIST
CPVC HANGER IN WEB BORE



Install per NFPA 13 and manufacturer's instructions

CPVC sprinkler system pipe
3" Max. dia. or 310# max. point load

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