Connection Detail A Maximum Limits:

Pitch Range: 12/12 maximum R = 670 lbs (2.98 kN)U = 610 lbs (2.71 kN)



Connection Detail B Maximum Limits:

Pitch Range: 12/12 maximum R = 670 lbs (2.98 kN)U = 360 lbs (1.60 kN)

Connection Detail C Maximum Limits:

Pitch: 5/12 maximum for TSC2.75 Valley

R = 670 lbs (2.98 kN)U = 175 lbs (0.78 kN)

Pitch: 3/12 max. for TSC3.00 or TSC4.00 Valley

R

Valley Truss @ 48"

(1219mm) O.C. max.

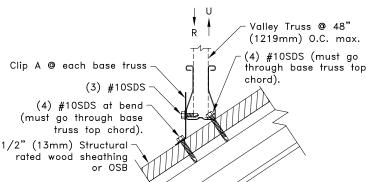
or OSB

1/2" (13mm)

Structural rated

wood sheathing

R = 800 lbs (3.56 kN)U = 175 lbs (0.78 kN)



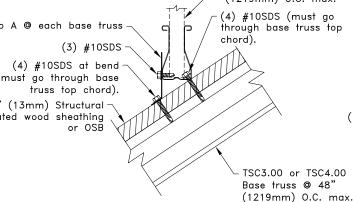
3/16" (5mm) diameter holes must be predrilled in clip B and valley bottom chord before wood screws can be applied.

TSUC5 bent to pitch @ 48" (1219mm) O.C. R Valley Truss @ 48" (1219mm) O.C. max. (3) #10SDS (TYP)

(5) #8 x 3/4" (19mm) Wood Screws

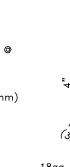
1/2" (13mm) Structural rated wood sheathing or OSB

(5) #8x3/4" (19mm) long rolled thread wood screws placed at clip bend and inside of valley bottom chord as shown.



Connection Detail D Maximum Limits:

Pitch Range: 9/12 maximum $R_v = 750 \text{ lbs } (3.34 \text{ kN})$ U = 360 lbs (1.60 kN)



Clip A @ 48"

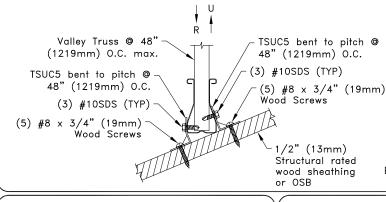
(3) #10SDS

(1219mm) O.C.

Clip A 18ga ASTM A653 SS Grade 33 G60 Bare Metal Thickness = 0.0428" (1.087mm) Bend clip to roof pitch

General Notes:

- 1. SDS = Self-Drilling Tapping Screw. #10SDS spacing, edge distance and end distance is 9/16" (14mm) minimum.
- 2. Refer to approved truss drawings for valley truss designs. Valley truss bottom chord panels not to exceed 4'0" (1219mm).
- 3. Wood screw values into wood are based on ANSI/AWC NDS-2018 with a 1.15 duration factor for gravity load, and a 1.60 duration factor for uplift load from wind or seismic.
- 4. R refers to vertical reaction and U refers to uplift.
- 5. Cold-Formed Steel calculations are per the 2020 supplement to AISI 2016 "North American Specification for the Design of Cold-Formed Steel Structural Members" (S100-16/S2-20).



4LPINE Trus**Steel**

www.TrusSteel.com

155 Harlem Ave., North Building, 4th Floor / Glenview, IL 60025 / (800) 755-6001

TrusSteel Valley Truss Connections for Rated **Wood Sheathing**

Alpine, a division of ITW Building Components Group, Inc. shall not be responsible for any performance failure in a connection due to a deviation from this detail. Any variation from this detail shall be approved in advance by Alpine, a division of ITW Building Components Group, Inc.

Standard Detail:

TS026B

Date:

06/01/22

TrusSteel Detail Category:

Valley Set