

TrusSteel Piggyback Trusses

Purpose of this Bulletin

This Bulletin will provide details and critical information needed for the use of TrusSteel steel trusses in piggyback situations.

Information

Refer to these documents for further information on piggyback trusses:

- Standard Details TS003, TS003A and TS003B for material and connection requirements,
- Technical Bulletin TB98.10.15 for design geometry information,
- TrusSteel Price List for information on available purlin material, hardware and fasteners.

Application

Before designing roof systems and trusses you will want to:

- identify all roof conditions that could require trusses whose height will exceed your maximum allowable truss height (candidates for piggybacking),
- decide what type of continuous framing / support you will use on top of the base trusses (roof decking / sheathing or continuous purlins),
- determine what type of clip you will use to attach the piggyback trusses to the base trusses or to the roof decking / sheathing.

During estimation you will want to account for these materials as well as for the fasteners required to install decking, purlins, clips, etc. You will also want to account for additional labor (if any) that is required to handle these materials and the piggyback trusses.

When designing the layout and trusses for your project, you should note that the TrusSteel SteelVIEW® software does not design piggyback trusses automatically at this time. You can pull trusses from the Layout program, change them into piggyback base trusses, and save them back to the layout as base trusses. You will need to create piggyback trusses in SteelVIEW® as new trusses. You must design the flat top chord of these base trusses using whatever top chord bracing you will use in the field (purlins at 2 ft. o.c. is typical – refer to drawing TS003 and TS003B). See Technical Bulletin TB98.10.15 for charts and details that will assist you in designing piggyback and valley trusses.

When transmitting trusses to Alpine for engineering review, it is very important that you mark and note all piggyback trusses as either “piggyback base truss” or “piggyback top truss”. If you are transmitting the trusses via modem to your regional Alpine engineering office, make this note in the comments box that appears when you Save Truss. If you are transmitting trusses by any other method (fax, mail, etc.), be certain to mark piggyback trusses appropriately on the truss drawing.

Before installing the piggyback trusses, the top chords of base trusses (bottom trusses that will receive and support the top piggyback trusses) must be fully braced with properly installed roof decking / sheathing or continuous purlins. You will want to note this on the erection drawings that you send to the field.

Included Documents

TS003
TS003A
TS003B

Revisions

- This bulletin was revised on 1/10/02 to add references to other standard details.
- This bulletin was revised on 1/15/03 to update all standard details attached to this technical bulletin.