# **Technical Bulletin**



# Material Handling & Storage Instructions

# Purpose of this Bulletin

TrusSteel materials must be handled and stored properly to avoid damage.

# Material Receiving and Handling

Inspect all materials immediately upon arrival. Report all damaged material immediately to TrusSteel Customer Service and note all damage on carrier's shipping documents. Always lift long pieces of material from more than one lift point to avoid crimping. Take care when banding - do not crimp or bend material. Do not store other materials on top of TrusSteel materials.

## Materials Storage

- 1. Coils or lifts of galvanized steel material shall be stored in a low moisture environment. Under no circumstances should stored material be allowed to become wet.
- 2. Formed parts shall receive the same care in storage. Formed parts, when stored in bundles, shall be stored at an incline to promote the drainage of any moisture and to avoid moisture build-up in and on the parts.
- 3. Storage areas shall have good ventilation. Storage areas that have poor ventilation, and that have the potential for trapping moist air in rising temperatures, can create a 'hot house' effect that can create condensation between the layers of rolled or bundled material. This trapped condensation can have the same effect on stored material as exposing it to direct moisture. We recommend the regular inspection of bundled materials to assure that moisture has not penetrated the bundle.
- 4. Storage environments shall have ventilation adequate to avoid temperature differentials in excess of 20° F between the stored material and the ambient temperature of the storage area. Environments that allow temperature differentials in excess of 20° F can promote moisture condensation on materials.
- 5. Cold steel materials shall be allowed to warm properly before storage. The rapid warming of incoming materials (when moved from a cool environment to a warm environment) can create condensation. If incoming galvanized steel feels cold to the touch, allow it to warm slowly in a cool indoor area, away from drafts. When the steel has warmed, it may be transferred to a proper storage area.

These storage instructions must be followed to avoid chalking. Chalking is created by the invasion of moisture between two zinc-coated surfaces that are not allowed to dry in an environment that has adequate air flow. The chalking is created through a chemical reaction between the two surfaces when they are stored in an oxygen-deprived atmosphere.

TrusSteel cannot be held responsible for the improper storage of galvanized steel (which may create chalking) once the material has been delivered to the customer's facility. Please review and adhere to the storage recommendations above to reduce the incidence of chalking in your stored inventory.

## Additional Documents

Refer to TrusSteel Design Manual for additional information on material handling and storage.

#### Revisions

- This bulletin was revised on 8/1/01.
- This bulletin was revised on 10/06/10.