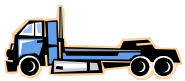
Chapter 3: Delivery and Storage Procedures

General

Confirm delivery trucks will have **clear access** to building site. This is important as drivers do not like "surprises". We are also trying to prevent having to move heavy materials any more than necessary!

 At least **10 feet width and up to 14 feet height** are required to deliver standard buildings. Large trusses can require 14 foot widths or more and ability to get truck (which measures approximately 32 feet) and trailer (which measures 48 feet) combinations **up to 100 feet in length** near building.

Delivery trucks and their payloads can reach up to 80,000# in weight! They generally do not have a tight turning radius and are NOT designed for off-road use. Because an RV, fifth-wheel, logging truck or a manufactured home has successfully navigated a road or driveway does NOT guarantee a truss or steel delivery truck can.

Again, keep in mind, the closer delivery trucks can get to building site, the less time will be spent moving materials.

Drivers will not endanger themselves or their equipment in making a delivery. Do not expect drivers to go anywhere they cannot drive safely in and out.

If adequate access is not available or materials cannot be safely offloaded at building site, have an alternate nearby location where they can be delivered. Should inadequate access prevent delivery you will be charged for redelivery.

 **Mark "landing zone".** This is the area, close to the jobsite, where materials are ideally stored, away from equipment (such as pre-mix trucks) accessing building.

A **red** spray-painted message **"DROP HERE"** on ground or a white paper plate on a stake with the same words or a big **"X"** in indelible marker is a big help. Whatever indicators are used, make certain they are obvious. If not present at time delivery, do not automatically assume offloaded materials will be placed in the most convenient location for future use.

When receiving materials from ANY supplier sign, "**NOT INSPECTED FOR QUANTITY OR DAMAGE**" on packing slip. If driver offers to remain while materials are inspected, extend the courtesy.

Notice to Owner

Some states require material suppliers to provide these to property owners. This notice is to advise property owners of who is providing materials to be used for improvements on their property. Should a notice be received, *it is not a lien*. The notice will include information which should be read and understood. To learn more about lien laws and notices, property owners should discuss with their contractor (if one has been hired), the material supplier, any appropriate state agency (usually specified on the notice), the firm who sent the notice, the improvement lender or an attorney.

INVENTORY - DAMAGE - SHORTAGE POLICY & PROCEDURES

READ, UNDERSTAND AND FOLLOW

IF ANY SHORTAGE OR DAMAGE IS DISCOVERED IMMEDIATELY

report to **Hansen Buildings at:**

www.HansenPoleBuildings.com/material.htm

This is the *ONLY* method to report damage or shortage.

INVENTORY BUILDING MATERIALS WHEN THEY ARRIVE!

48 hours and *48 hours* ***only***, after receipt, is allowed to report "hidden damage", missing or damaged goods(including those arriving in sealed containers), as well as any "quality" issues. Sadly, job sites suffer a high theft incidence, especially when they are left unattended. Also, "incidental damage" probability increases over time. These warnings are repeated for *your* benefit.

Hansen Pole Buildings, LLC, along with our suppliers, endeavor to provide the best available materials, in their entirety and in best possible condition. UNDER NO CIRCUMSTANCES are we responsible for damage or shortages reported days, weeks, or months after the **48-hour guaranteed replacement time**.

Any materials reported as damaged or unusable within the first 48 hours after delivery can be exchanged at supplier's location for a replacement with *no charge*. Any verifiable shortages reported within the first 48 hours after delivery will be delivered as quickly as possible, again at ***no charge*.**

If choosing to either use damaged, errant or short shipped, or mis-ordered materials, or to purchase *any* replacement material *without* Hansen Buildings, or our suppliers, prior written authorization you take total responsibility for finished product outcome (both aesthetically and structurally) as well as any costs incurred. In simple terms – you buy it, you own it. Do not expect to be reimbursed.

Under no circumstance can or will Hansen Buildings, or our vendors, assume liability or responsibility (or reimburse anyone) for any labor, storage, rental or equipment charges, or for any lost time or loss of use due to shortages, damages or delays regardless of cause or fault.

Most challenges we deal with are from failure to inventory. Again, we can't stress often enough, inventory materials!

If construction is ready to begin and something is found to be missing, or an expected delivery is not yet received, do not hesitate to report it through the website:

www.HansenPoleBuildings.com/material.htm

Do ***not*** wait until the last minute! There are times, although rare, where orders to vendors have gone awry or been shipped by vendors, never to be seen again. **Notify us,** if this is the case.


If hiring a contractor, confirm all materials have been delivered, prior to contractor arrival. As well, scheduling a vacation or "barn raising" before material arrival, can result in disappointment. Do not automatically assume materials will be able to be delivered on time for an asked for date of construction start, unavoidable delays do occur.

In the unlikely event an error or damage is discovered, resulting in other materials needing to be ordered and/or shipped, please allow sufficient time for the order to be processed and prepared for you to pick up, or be delivered to your site. With some items, this may take several weeks.

Common carrier deliveries

Do not accept merchandise with any evident visible damage. When carrier attempts delivery, contact the person listed on vendor list for specific instructions. **At delivery, list carton or pieces refused amounts, due to damage, on freight bill. In the event an entire shipment is refused, notify contact person immediately.**

Keep a freight bill copy showing carton or pieces refused numbers.

If carrier does not allow partial refusal

In the event carrier does not allow a partial shipment refusal, accept entire shipment and indicate damaged cartons or piece quantities on freight bill at delivery. Retain a copy freight bill with damage noted.

The vendor contact person is to be notified with invoice number, shipping number, carrier name and project number within forty-eight (48) hours after delivery. Hold damaged goods for carrier's disposition. This includes inspection by carrier and carrier's right to salvage when claim is filed.

Concealed damages

If concealed damages are discovered, notify vendor contact person AND delivering carrier **within 48 hours after delivery.**

OPEN CARTONS IMMEDIATELY UPON RECEIPT AND BEFORE SIGNING ANY PACKING SLIPS and inspect for damage. These items are easily damaged during shipment. Failure to clearly write damage on packing slip at receipt could result in having to use in condition received.


Reiterating the above **DANGER**, specifically with entry doors, OPEN CARTON IMMEDIATELY. Inspect all door sides, edges and jambs for any damage, including (but not limited to) surface dents, scratches, bubbles, blemishes, de-lamination or panel warpage. Verify lockset, with keys, and an installation screw package are received. Failure to do so immediately constitutes door acceptance as complete and usable as received. We have no recourse against suppliers after delivery. Therefore, in no case can or will any damage claim or missing items be allowed after any door has been accepted.

Make certain manufacturer's installation instructions are with windows and doors.

Check windows for square by measuring diagonally from window upper right to lower left corner. Then measure from upper left to lower right corner. If these measurements are exactly the same, window is square. Make certain all parts are there, including screen, and window opens easily, correctly and from the specified side. If diagonal braces are attached to window, to keep square, leave these in place until window is installed.

Excess Materials

In the event excess or wrong materials are shipped to site, notify us. These materials remain either Hansen Buildings or our vendor's property. Unless instructions are received otherwise, do not plan upon using, as they will most often be picked up and returned. These materials are often available for purchase at a reduced price. If advised excess or wrong materials were delivered to site, expect to be invoiced if they have been used. Should building be completed and usable materials of more than a board or two, or a handful of screws remain, contact Hansen Buildings prior to use or disposal.

You may want to postpone some deliveries to prevent possible jobsite damage.

 Sometimes deliveries cannot be delayed without extra costs to you due to market price changes or delivery cost effectiveness.

 If a delay in any material delivery is desired, *for any reason*, contact your Hansen Buildings' Project Coordinator immediately.

In the event you choose to delay a delivery, which is tied to a payment, the payment becomes due and payable immediately.

Lumber Delivery

Lumber deliveries in some areas (primarily **Arizona, California** and **Nevada;** sometimes the **Carolinas** and **Virginias**) **will need equipment to off load**. Common industry practice is for lumber and truss suppliers to "dump" or "roll" materials off trucks or trailers which are designed for this type offload. This process happens thousands of times a day, all over the country, so do not be surprised if materials are delivered in this fashion.

Compare material delivered against material takeoff list to verify lengths and quantities match on all material. Shorter lumber pieces (typically six feet or less in length) may be combined or added onto shorter pieces, including dog-ears for residential overhead door openings. A thorough quantity and length check will confirm this. Longer, larger, or higher grade materials are often substituted for what is on material takeoff or building plans.

Also at this time, sort all dimensional (2") lumber by size, length and grade (e.g. 2850, 2400, 2250, 2100, 1950, SelStr (Select Structural),1800 or 1650 msr; #1, #2, std & btr or stud). MSR is short for "Machine Stress Rated" lumber.

While Hansen Buildings' lumber suppliers make all efforts to send the best available materials, there are times when one or more pieces do slip through quality control process cracks. Be thoroughly familiar with this segment's allowable defects portion. Some lumber may not "look pretty" yet actually meet grading standards. "Looking pretty" is like "beauty is in the beholder's eyes" – highly subjective. Professional lumber graders are trained and certified to know what characteristics constitute "on grade".

If, within the first ***48 hours*** after receipt, lumber is found which has defects far *beyond* those listed below, report ***immediately*** via your login.

Lumber not properly cared for can deteriorate rapidly. Therefore, any defects not reported within the first 48 hours after receipt will be considered to be beyond Hansen Buildings and our vendors' control. After the 48 hour reporting period replacement lumber costs are customer's responsibility.

Allowable defects

Some discussion will be made here about "allowable defects" in lumber. Wood is an organic material. While produced in a "factory" environment (a sawmill), lumber is subjected to naturally occurring defects, which are accounted for in the grading rules. These characteristics are taken into account in the strength values for allowable design.

Lumber used in trusses falls into this same discussion. Truss lumber is chosen for strength characteristics, not due to "pretty looks". If the expectation is the trusses were to be built from clear, vertical grain, knot and wane- free lumber, a severe disappointment is going to occur. Lumber "appearance" is NOT a reason to reject any truss.

All dimensional framing lumber used in Hansen Buildings is at least graded as #2 (or "standard") or better. For discussion's sake, we will limit the scope to this grade. Four inch and smaller (e.g. 4x6 and any two inch – 2x3 {in many instances, 2x4 will be supplied for 2x3 at no extra charge} through 2x12), are all graded as what is known as "joists and planks". The characteristics listed below are not intended to be all-inclusive, but merely to be a frequently seen item overview.

In any given lumber "production run" typically 5% is allowed to be outside grading rules (to have more defects than expressly allowed) and still have the sum total declared as "on grade".

See also: Glossary at Construction Guide end for any lumber term explanations.

- **Checks** – seasoning checks are not limited. Through checks at ends are limited as ***splits.*** Splits can be equal to 1-1/2 times board face width (e.g. 8-1/4" on a 2x6, 16-7/8" on a 2x12). Keep in mind, many times these boards will be trimmed off, especially when used as purlins or rafters. A split portion may thus be removed when trimmed to be put into service.
- **Knots** – on a 2x6, up to 1-7/8" at wide face edge, 2-7/8" at wide face centerline; on a 2x12 up to 3-3/4" at wide face edge, 4-3/4" at wide face centerline.
- **Holes** – (from any cause) on a 2x6 1-1/2"; on a 2x12, 3".
- **Wane** - up to 2/3 thickness and 1/2 width for 1/4 length. An example would be on a 12' long 2x6, wane could be 2-3/4" on wide face, 1" in depth across 1-1/2" face and 3' in length.
- **Bow (or Crook) -** is a board size and length function. As an example: for a 2x6x12' - 5/8" is acceptable, with greater amounts allowable with longer lengths.
- **Twist -** for a 4x6x16' would be allowable up to 1-1/2" and still be within grade.

Timbers

5" x 5" and larger are graded as "Posts and Timbers" and have their own characteristics. Again, addressing #2 grade, they include:

- **End splits** - up to twice the post face are permitted: (Ex: 12" on a 6" face.)
- **Wane** - 1/3 of face.

Bow, crook and twist are ***NOT*** limiting factors under the grading rules for posts and timbers.

Incidental damage from material handling equipment which does not adversely affect the lumber greater than the allowable defects listed above, would not be a reasonable cause to reject.

Building plans may specify "6x4" or "6x2" materials. This is due to material orientation rather than being a special board or item. As an example: a 2x6 and 6x2 are the same board, rotated 90 degrees in use.

Rough Sawn Lumber

Rough sawn timbers can vary greatly in dimension, even in one board. While building plans and this construction guide assume a 6 x 6 will be 5-1/2" exactly in dimension, in real life a rough sawn timber could be as small as 5-1/2" or as large as even 6-1/2". These millage variations are not unusual. By placing columns appropriately, according to instructions, no more than a minor inconvenience will be posed.

Truss Delivery

With larger truss spans (usually over 40' in width), contact truss manufacturer to determine if lifting equipment will be needed to help off-load trusses. In no case, does unloading include truss setting onto building columns, by crane or any other equipment.

Unload trusses carefully, in bundles, in a manner to minimize sideways strain. While unloading, check for broken or damaged members, noting any such damage on packing slip. Whether present or not, at truss delivery, trusses may be delivered flat onto ground by driver. Move trusses into a proper position for storage or use.

Most metal plate connected wood trusses are fabricated from 1-1/2 inch lumber and 20 gauge steel plates, which have tooth projections approximately 5/16 to 3/8 inch in length. Different plate manufacturers have slightly different plate designs, but the application is the same.

If improper truss handling causes bending forces perpendicular to the truss plane, truss plate joints may become weakened by truss plate "teeth" withdrawal from lumber.

Handle trusses at job site to not subject to excessive bending. Trusses are strong in the vertical position but can be damaged at plate joints if loaded in the lateral (flat) direction.

Report apparent damage to trusses, if any, prior to erection to both Truss Manufacturer and Hansen Buildings via website login.

At delivery, engineer sealed truss drawings are usually provided. If this did not occur, ask driver to call truss company office and have drawings mailed. Sealed truss drawings are not sent with building plans.

Some Building Departments ask for engineer sealed truss drawings to be provided at permit application. If this particular case occurs, contact your Hansen Buildings Project Coordinator who can have them sent. Normally, truss manufacturers would rather not provide drawings prior to actual truss fabrication, as available lumber sizes and grades may change and chances are trusses delivered to building site, will not be an exact match to drawings provided weeks or months earlier.

Steel Roofing and Siding Delivery

IMPORTANT INFORMATION ABOUT STEEL DELIVERIES

Before Materials Arrive

Read "Deliveries and Storage Procedures" at the start of this chapter. This section gives important information on delivery arrangements, delivery truck size, clear area required at building site and how to mark unloading areas.

The steel company will normally call day before truck is loaded to give an ETA (Estimated Time of Arrival) and to make certain a responsible adult will be present to receive order. Ideally receiving person is someone who is directly involved with the building project, is able to identify steel order components, and note any damage. Receipt includes counting materials received, checking for damage and signing paperwork.

If the steel company fails to make contact prior to delivery, driver arrives, and ***no one is there to receive,*** delivery will be routed back to plant and shipped on next available truck, at no charge, after contact has been established.

If you have been contacted, but are not present to receive order, materials will be returned to plant and will be routed again on next truck available, BUT

 **There will be a $500 minimum delivery fee for the second trip.**

The steel company delivery driver is not a Hansen Buildings employee therefore we cannot dictate an exact delivery time. Your responsibility is to have adequate offloading equipment, if necessary, as well as an accessible and safe drop site for delivery equipment.

Steel Unloading

▶Offloading is NOT available in most areas. This is your responsibility.◀

DRIVERS ARE NOT REQUIRED TO UNLOAD.

Handle each steel bundle (or skid) carefully, to avoid damage. Take care to prevent bending panels or scratching finish. Use straps at least three to four inches wide.

Improper bundle loading and unloading may result in bodily harm and material damage. Under no circumstances are Hansen Pole Buildings, LLC or our vendors responsible for bodily injuries and material damages resulting from improper loading or unloading. Again – any materials damaged while you are unloading, for any reason or cause, you and you alone are responsible.

 **Do not**, under any circumstance, use rope or chain to unload steel.

Whenever possible, keep bundle crated until placed at storage location. Then, break bands and - **AT A MINIMUM** – lift up cover sheet to inspect for any damage and correct color. If no damage is present, re-bundle.

Panels up to 20' in length: A forklift may be used to unload panels up to 20' long. Place forks at their maximum separation. Do not transport open bundles. When transporting bundles across rough terrain, or over a longer distance, use some means to supporting panel load.

Panels greater than 20' in length: Use multiple forklifts or a crane. With a crane, use a spreader bar to ensure even weight distribution to pickup points.

As a rule, when lifting panels, leave no more than 1/3 panel length unsupported. ***Never use wire rope or cables***, as this will damage panels.

We cannot stress enough how important it is to inventory each steel delivery item for damage, shortage, correct color, correct length, or any other defects! Do not assume, because material is bundled in a skid, shrink-wrapped or in a carton, all pieces are there, correct color or are in useable condition. Examine trim pieces for any "road wear" or scratches caused from shipping.

 Steel trims may be delivered coated individually with a clear or colored plastic protective film. This film can "hide" a multitude of damage, typically scratches or dents. Look these pieces over carefully.

 Note any item found other than 100% correct, for any reason (short shipped, damaged, wrong color or length), on driver's paperwork (if driver is still present) at delivery. Failure to list any issue – **makes you responsible for replacement item cost (including delivery charges)**. We suggest taking time prior to delivery, to become familiar with material take-off sheet, have it available and pay close attention when steel is delivered.

Overhead Doors

Overhead door suppliers will replace or repair merchandise found to be defective due to quality or manufacturing defects. No credit will be given for merchandise damaged due to improper handling or storage.

For loss or damage in shipping, obtain a written statement from carrier's representative as to loss or damage circumstances and deliver a copy to door vendor. Make any claim for loss or damage in transit only against carrier. An overhead door company authorized representative may have to inspect any damaged merchandise. When a representative is not available, defect/damage photographs and returned samples may be required.

Minor scratches on pre-painted steel doors are not defects.

When a door is received with missing or broken parts, these parts will be replaced at no cost provided Hansen Buildings and vendor are notified within ***48 hours*** after product receipt. Vendor's customer service manager will approve a part to be shipped via next truck or a next day small package carrier depending upon product installation urgency.

Your responsibility is to check all shipments for completeness and damaged material.

Overhead Garage Door Return Goods Policy: *Goods may not be returned except with prior consent of and subject to terms specified by the overhead door supplier.*

All returns are subject to a 15% restocking charge.

"Special Order Doors" may not be returned for credit. Any door or part that has been installed may not be returned for credit.

Overhead Garage Door Delivery Policy: The overhead door supplier requires end customer, to sign and date a pick list when a delivery is made via a delivery truck. If order is shipped LTL (less than truck load) then Bill of Lading will serve as Proof Of Delivery (POD). This policy is to ensure your garage door product is received as ordered and damage free. When the overhead door supplier has confirmed a delivery date and time with you and there is no one to receive product at job site, the driver will take product back to door center and reschedule delivery. When this occurs, Hansen Buildings will be notified immediately and a "SECOND TRIP CHARGE" (generally 12-15% of door price) will be applied to order. This entire charge is to be paid, prior to a second delivery attempt.

Merchandise delivered on a door company truck

When merchandise is delivered with obvious damage or shortage, note on carrier's receipt, pick list, freight bill, bill of lading or contract and refuse damaged item(s). If you are requested to hold goods for a later pickup or disposal, a door company representative may inspect and verify damaged product.

Hardware & Misc. Item Deliveries

All hardware, vinyl soffit and insulation shipped direct from Hansen Buildings (i.e. reflective insulation, bolts, 40d nails, joist hangers, LSTA12s, closures) is usually sent by either FedEx, UPS and/or United States Postal Service. Tracking information for these items will be available through login, following shipment. We allow **10 days after shipment from Hansen Buildings** to report any missing or not received parcels. After this, tracking becomes almost impossible and replacement costs will be assumed by you. **Therefore, notify us before the 10th day, of any materials not yet received.**
Open ALL boxes and inventory all items – inspect for correct colors, verify all items carrier noted on HARDWARE SHIPPING LIST have arrived. **Notify Hansen Buildings within 48 hours of any missing or damaged pieces for replacement. After 48 hours, replacement costs will be assumed by customer**.

Windows and gable vents are usually direct shipped from the manufacturer.

General Material Storage

Store off ground any materials which will not to be used within construction's first few days (or more than a week after delivery) and cover with a tarp.

- Some materials will be delivered in cartons. Avoid storing cartons in stacks.
- Store cartons protected from falling materials or tools which could damage enclosed contents.
- Keep cartons dry. The best place to store cartons is indoors.
- If cartons are stored outside, cover with a loose-fitting, light colored tarp, arranged to allow ventilation. This is critical, because some materials (especially vinyl) can be damaged if heat is allowed to build up around cartons.
- Take special care storing any screws,
- Bolts, nuts and washers in a location where they will not become damp or rust.
- Windows, entry and overhead doors will frequently be delivered in cartons or crates.

Lumber Storage

Ideally, lumber is used promptly. Otherwise store in a cool, dry location, avoiding direct sunlight and preferably indoors where humidity variations will be minimal.

Dry lumber

Unlike green lumber, keep kiln or air-dried lumber away from moisture, otherwise product may lose the value added by careful seasoning. Dry lumber which becomes saturated with water, such as from rain, melting snow or contact with wet ground, can lose dimensional stability, warp and otherwise deteriorate. Lumber exposed to alternate wetting and drying will check, split, warp and discolor.

If stored outdoors, keep dried lumber off ground and protected by paper, wrapping, tarpaulins, or canvas. Paper wrapping offers short-term protection and, if torn, repair immediately. Dilapidated wrapping which holds rainwater may increase moisture regain more than if the lumber had no protection.

Why use dry lumber? Lumber which has been grade stamped at a 19% or less moisture content is termed "dry lumber". Dry lumber is relatively dimensional stable – meaning the shrinkage probability is negligible. University research studies have shown an 8' long 2x4 will lose approximately 1" in length, when naturally drying. Drying lumber also reduces chances mold or other fungi will attack wood. "Green" (20% or higher moisture content – not the color) lumber is prone to warp, cup and split as part of the natural drying process. The holding power of nails, driven into green wood which dries in place, drops substantially over time.

Air flow is the most important factor in outside lumber storage. Allow large volumes air to circulate freely around stacked lumber in order to evaporate moisture from the lumber. Provide an open storage area with no trees or buildings blocking air flow. Remove weeds, grasses and other vegetation around lumber as they harbor insects and fungal spores.

Good water drainage in storage area is important. Standing water adds to humidity which increases mold and stain possibility on lumber.

When lumber is stacked on stickers (see **"dunnage"** in glossary), place stickers in perfect vertical alignment with one another. Otherwise, sagging will occur. Solid stacked lumber is often stored in packaged units bound with tie straps (or banding) for easier handling. Separate stacked units by spacers, usually at least 4", and aligned with lower stickers to prevent sagging.

Storing lumber under a roof offers better protection by keeping material dry and bright.

Lumber, especially ***pressure preservative treated***, is particularly susceptible to warping and twisting while curing. These materials are best incorporated into building as quickly as possible. In the event lumber will not be used immediately keep bound tightly.


Bands placed by lumber company will rarely be adequate to maintain dimensional stability. Tight chains or cable restraints around lumber at frequent intervals, tightened as material dries, may help. Even these measures may not be adequate to prevent lumber warp, twist and bow.


In any case, prior to installation in building, protect pressure treated lumber from direct sunlight and rain.

Truss Storage


Trusses store best when standing upright.

Well shore and brace standing trusses to keep from toppling. Trusses which are not stored in a vertical position can and will warp, and become difficult to use.

Store trusses with "tails" (overhangs) so truss weight *does not rest on tails.*

Unload trusses in bundles and store on level ground, but never in direct contact with ground (to avoid collecting moisture from ground). Allow for good drainage at truss storage location in the event rain occurs before installation. Protect trusses from damage resulting from on-site activities, environmental conditions or the elements. Exercise care at all times to avoid damage to trusses due to careless handling during delivery, unloading, storage, and installation.

In warm, rainy weather, moisture regain in unprotected trusses can result in fungal staining. Wetting the lumber also results in swelling. Subsequent shrinkage of framing may contribute to structural distortions.

To store trusses for a long time period, cover with a water repellant tarp for protection. Plastic is an acceptable alternative, provided there are side openings to allow air flow.

Handle trusses in such a way as to prevent toppling when banding is removed from bundles. Trusses stored on black top or other impervious surfaces and continuously moved around construction site are subject to damage when they are slid along surface with equipment. As a result, the galvanized coating on connector plates may be removed, allowing plates to rust and possibly reduce plate thickness.

Steel Roofing And Siding Jobsite Storage

All steel roofing and siding panel bundles are inspected and approved by manufacturer's quality control inspectors before shipment. Inspect panels for any moisture content or shipping damage upon delivery and advise carrier immediately.

Bare (non-painted) Galvalume sheet, like galvanized, is subject to wet storage staining and turns gray to black if moisture is trapped between coil laps, cut length sheets, or roll formed parts during shipping and storage. The steel mill treats Galvalume sheet to retard wet storage staining; however, take precautions to keep Galvalume sheeting dry at work site.

Jobsite storage of steel building panels (provided by the Building Products Technical Committee of the National Coil Coaters Association):

Two Rules to Live By:

1) **Keep job site storage time to a minimum with proper scheduling**
2) **Keep panels dry.**

"Moisture trapped within panel bundles can cause the finish to soften and become more susceptible to erection handling damage. Panels stored wet for extended periods in humid conditions will oxidize (rust). Such damage is avoidable with proper planning and practice.

Panel bundles should be stored under a roof or, at least, out of direct sunlight. Bundles should be slanted at an angle [from end to end] sufficient to facilitate drainage and high enough off the ground for good air movement all around. Do not use tight-fitting plastic-type tarpaulins as panel bundle covers. While they may provide protection from heavy downpours, they can also retard necessary ventilation and trap heat and moisture causing the so-called "greenhouse effect" that accelerates corrosion. Long panels must have additional support to prevent sagging and potential water accumulation in the sag.

If panel bundles arrive wet or become wet at the jobsite, break them open and allow them to dry completely."

When moisture is found, besides breaking apart bundles, drain each panel and wipe dry. After dried, carefully restack panels and loosely recover allowing for ample air circulation.

Extended panel storage in a bundle is not recommended. Do not allow bundled sheets to be in contact with accumulating water. Under no circumstance store sheets near or in contact with salt water, corrosive chemicals, ash, or fumes generated or released inside building or nearby plants, foundries, plating works, kilns, fertilizer, and wet or green lumber.

Polycarbonate Panel Jobsite Storage

Recommended storage procedure for Polycarbonate panels (eave lights):

Store panels horizontally, on flat sturdy pallets, equal or longer than longest panels. Stack short panels on top.

Store polycarbonate panels in a cool and shaded place, avoiding direct sunlight, ideally, indoors in a cool, dry, well-ventilated area. Avoid covering the panel stack with dark or heat-absorbing materials or objects, to prevent solar heat buildup. When stored on skids, stack panels no more than 250 pieces a skid. Avoid double stacked skids, or stacking anything atop panels. Do not allow moisture to collect on or between panels.

When necessary to store panels outdoors, cover stack with a white opaque polyethylene sheet, corrugated cardboard or other materials which do not absorb or conduct heat. Verify entire stack is covered.

Polycarbonate panels are tough, requiring no special care. We recommend some cautionary steps: avoid stepping on or driving over panel while on ground, or folding during handling and installation. Avoid dragging panel on ground, scraping against structural elements or any other sharp or rough objects, to keep from getting scratched.

Polycarbonate panels are resistant to a variety of chemicals and exhibit limited resistance to a second chemical group. A third chemical group may attack and damage panels. Damage degree and severity depend upon chemical type and exposure duration. Polycarbonate panels will melt down at approximately 400 degrees F.

Faced Fiberglass Insulation Jobsite Storage

Recommended storage procedure for Laminated Fiberglass (metal building insulation):

Special care is taken to insure orders meet specifications, including delivery.

Inspect all materials when they arrive. If shortage or damage, make a notation on shipping papers and contact us as soon as possible.

Insulation labels (roof, sidewall or endwall) are frequently provided. These tags are used to indicate each roll length, width and thickness. These tags will also usually tell if any field cuts are to be made. We suggest all rolls be sorted according to placement.

Heavy-duty polyethylene packaging guards are used to provide protection against handling damage and the elements. If installation is ever delayed, open wrapper ends to allow for air circulation and store insulation in a well-lit, dry, protected area.

Elevate all packages above ground or slab, away from walls, and stored on a flat surface. This helps prevent contact with water and allows air to circulate in and around insulation. Exercise care in handling since vapor barriers often tend to be damaged during storage. Weather permitting, packages may be left uncovered during the day, but protected at night with a polyethylene film, canvas or other covering type.

The easiest way to avoid damaging insulation is to arrange delivery so installation can occur immediately after arrival.

Animals, especially dogs, tend to be attracted to and damage metal building insulation rolls.

Ready to start actual construction?

HERE

WE

GO!

Following is a brief construction order outline. Individual buildings may have more or fewer features than this standardized outline.

1. Obtain planning, zoning and building permits (where required)
2. Grade site
3. Layout building
4. Dig holes
5. Call for hole inspection (where required)
6. Set columns in holes, backfill per plans
7. Skirt boards
8. Install trusses or rafters
9. Purlins and all other roof framing
10. Apply roof insulation, roof steel and ridge cap (or sheathing, felt and roofing)
11. Girts and all other wall framing
12. Call for framing inspection (where required)
13. Entry doors, sliding doors and windows
14. All steel wall trims except corners
15. Wall steel and corner trim
16. Overhead doors
17. Concrete floor
18. Call for final inspection (where required)
19. Enjoy new building