

AutoCeil Building Contractor Options

AutoCeil™ is a safer, faster, and easier method of installing ceiling and wall liners in buildings to support insulation and finish interiors without the use of steel strapping with bottom side fasteners. Thermal Design specifically manufactures the AutoCeil sheet to fit each building bay, covering both sidewalls and ceilings of buildings up to 200 feet wide using a single AutoCeil sheet, supported by support struts which span each bay. Wider buildings use splices on struts. From the floor, up one sidewall, across the building width and down the opposite sidewall to the floor can be pulled in minutes using dual AutoCeil winches operated by a single worker. The AutoCeil sheet is then tensioned, fastened, sealed, and insulated in that bay as the roof is installed. Alternatively, to further speed building enclosure, the AutoCeil sheet and insulation may be completely installed over the struts from the interior, in controlled conditions, by contractors without the need to use experienced steel erectors. **See installation video, specifications, and instructions at: www.autoceil.com**

AutoCeil™ Materials and Winch System (ceiling support struts purchased separately):

Thermal Design will quote the fabrication and delivery of the AutoCeil ceiling and/or wall sheets, Compress-R™ retention angles, fasteners, sealants, and insulation to complete all quoted bay areas. **Strut Purchasing Options are listed below:**

Option 1:

Ceiling support struts and strut end attachment brackets with fasteners will be designed and made available from Thermal Design, Inc by quote, delivered to the job site with complete installation instructions.

Option 2:

Ceiling support strut end attachment brackets with fasteners will be designed and made available from Thermal Design, Inc by quote, delivered to the job site with complete installation instructions; **AND**

Specified commodity ceiling support struts and bolts will be purchased directly from a third party components supplier or steel service center of the customer's choice and total delivered cost.

Option 3:

AutoCeil compliant ceiling support struts and end attachment brackets with fasteners and bolts are designed and purchased directly from a third party vendor of the customers choice, such as a local fabricator, components manufacturer or a metal building manufacturer.

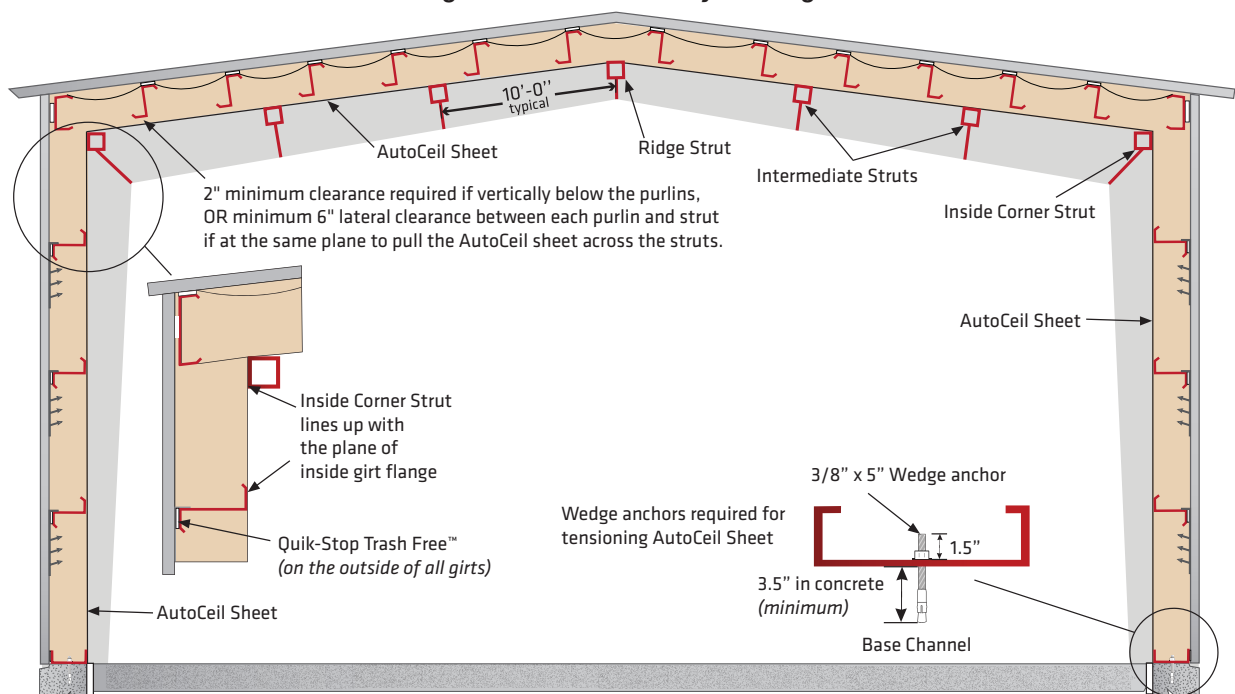
1.5 *less than*
lbs/ft²

Approximate Total Weight
 of *typical strut system, brackets,
 and R30 AutoCeil™ System

*Based on an R30 in 25' bay.
 Your building may vary. Ask for details



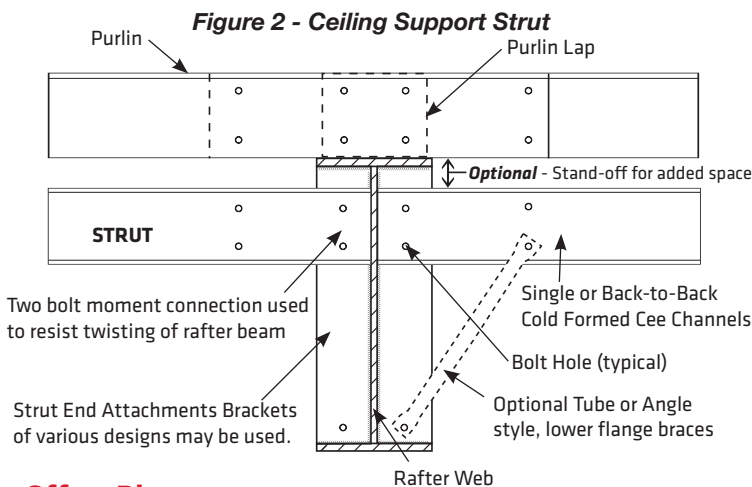
Figure 1 - AutoCeil Ready Building



Adding Ceiling Support Struts

A series of steel support struts are required spanning between adjacent rafters that are designed to support the AutoCeil system in the building and may provide simple span, temporary bracing in each building bay to speed erection. The struts are preferred at 10' spacings from the center ridge down to each sidewall with the struts nearest the side walls being a variable lesser space. The top surface of the struts shall be smooth and free of any projections, sharp edges, welding spew, etc, to avoid damaging the AutoCeil ceiling sheet as it is winched over the struts. Assure building frames will carry weight of AutoCeil and struts (1.5lb/sf² min for R30). **(Figure 1, Figure 2)**

- **Intermediate Strut** - placed 10' on-center starting from the ridge line or high side wall.
- **Ridge Strut** - placed approximately in the center of the ridge purlin space.
- **Inside Corner Strut** - placed to align with the inside steel line of the wall girts. **(Figure 1)**



Offset Distance

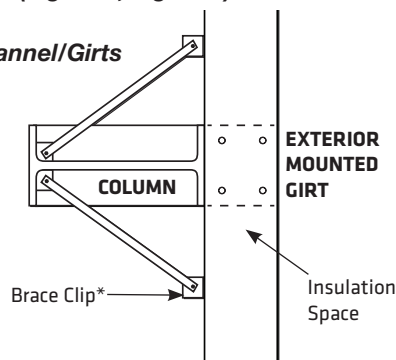
No offset distance is required except if struts are desired to be vertically aligned with the purlins where a minimum clearance of 2" is required for the winch pull-in apparatus. At the same plane, a 6" minimum lateral space is desired between strut top side and bottom of purlin. Other configurations may be possible. **(Figure 2)**

Base Channel on Exterior Walls

By-pass mounted wall girts should be ordered allowing space for full specified thickness of fiberglass insulation to be installed between the wall panel and the building wall columns. Base channel, secured by wedge anchors is the required method for base channel attachment for all base Cees as these are used to anchor the tensioning devices. **(Figure 1, Figure 3)**

Figure 3 - Base Channel/Girts TOP VIEW

*Multiple self-drilling fasteners preferred through each clip into the girt flanges, or bend a brace flange at appropriate angle to flush mount brace directly to girt with multiple self drilling fasteners.



Stand-off Purlins/ Exterior Mounted Girts (optional)

Purlins may be elevated off the top of the rafters up to 10" and girts exterior mounted to create additional insulation space and are typically available through your metal building manufacturer.

Savings & Benefits

The AutoCeil System offers many savings and offsets that will lower the building cost. These savings will result in:

- **No bottom side fasteners into purlins.**
- **No straps or banding.**
- Fewer parts and pieces than other methods.
- Struts install twice as fast as strap systems.
- Struts as simple-span braces speeds erection.
- Significant crane and lift rental savings.
- 80% fewer edges to seal than faced insulation.
- May be installed from the interior by others.
- Less weather related erection delays.
- HVAC, lighting, and electrical system savings.
- Energy Code compliance guaranteed.
- 65% reduction in HVAC equipment may be achieved
- Convert metal buildings for passive solar collection.

› Safer › Faster › Easier

For more about the benefits of AutoCeil visit: autoceiling.com



Thermal Design, Inc. manufactures the AutoCeil™ System and provides all components required to complete the installation for buildings that are ordered to the specifications. Specification available at www.autoceiling.com

Thermal Design and www.autoceiling.com will assist manufacturers with any questions about AutoCeil. Thermal Design will assist builders with building manufacturer referrals.

AutoCeil-Inside Edition™

Speed up construction projects with the AutoCeil-Inside Edition™ by subcontracting our high quality ceiling and wall insulation system to specialty insulation contractors to be installed from the interior, after the roof has been installed. **Reduce weather delays, save time, and pay less in labor costs** to install the patented AutoCeil ceiling and wall insulation system.

For more information and a free quote contact:



800.255.0776 | www.thermaldesign.com