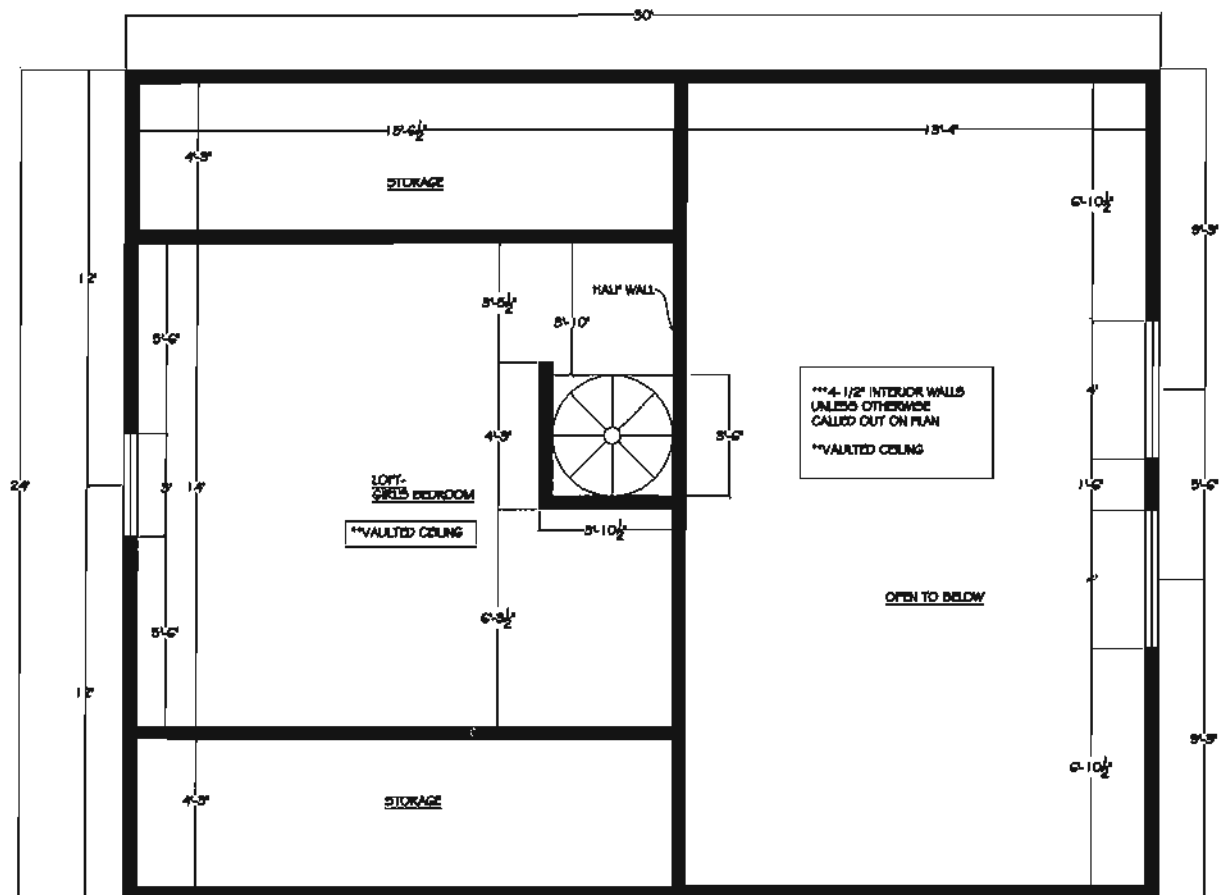


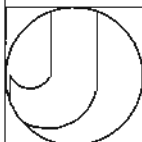
Julkowski, Inc.
P.O. Box 577
Circle Pines, MN 55014

Brandt Cabin
Canton, MN 55922

Date: 4-25-11
Revisions: 12-22-10, 1/7/11
1/19/11, 1-14-11, 2-9-11, 2-18-11,
4-18-11



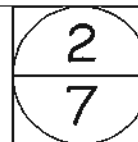
DIMENSIONED FLOORPLAN - LOFT LEVEL (220 SQ. FT.)
SCALE: 3/16" = 1'-0"

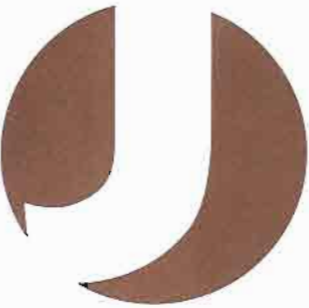


Julkowski, Inc.
P.O. Box 577
Circle Pines, MN 55014

Brandt Cabin
Canton, MN 55922

Date: 4-25-11
Revisions: 12-22-10, 1/7/11
1-9-11, 1-14-11, 2-9-11, 4-18-11





julkowskiinc.com

2011 Julkowski, Inc. SIPA Award Entry

Brandt 100% SIP Cabin

Description of SIP Frost Protected Shallow Footings:

Most people expect that a permanent building foundation needs to extend 4' to 5' below the finished grade to provide protection against the effects of seasonal freezing and thawing. A different approach to this is the use of the Frost Protected Shallow Foundation. For many years this type of foundation has been widely used in Canada and the Scandinavian countries of Northern Europe. Where it differs from a standard deep frost foundation is that this foundation uses insulation both vertically and horizontally at the footing elevation. The FPSF incorporated into the cabin built near Canton, MN is built with SIPs. The panels consisted of 5/8" treated plywood laminated to both sides of 5-5/8" expanded polystyrene insulation. These 24" tall panels were set on a treated 2x10 that rested on a bed of washed rock. Once these foundation panels were set, drainage tile was installed around the perimeter of the cabin and a layer of 3-5/8" expanded polystyrene was laid down at the footing plate line and extended out 48" from the foundation panel. The exterior and interior of the foundation walls were then backfilled with washed rock to provide positive drainage and create a solid base for the floor of the cabin. SIP floor panels were then installed over the rock. These panels consisted of 5/8" treated plywood laminated to both sides of 3-5/8" expanded polystyrene with treated 2x4's serving as splines to join the 4' x 8' panels together. From this point, the installation of SIP wall and roof panels continued as if building on a conventional concrete foundation and slab.

Some advantages of using this system included less disturbance of soil on the site, eliminating the need to use any concrete on the project, dealing with moisture problems while the concrete is curing, and having a wood floor ready for a variety of floor finishes. The SIP floor will not wick moisture like concrete may and it reflects heat within the cabin back to the interior rather than pulling it away. All of this adds up to a comfortable and cozy cabin.

~ Curt Stendel, Panelworks Plus

Julkowski inc.

James 612-685-5291 ph Project Management

Rachel 612-845-6937 ph Design

• • • • •



2011 Julkowski, Inc. SIPA Award Entry
Brandt 100% SIP Cabin

Testimonial:

Even on the windiest days the interior is quiet and calm. It's comforting to watch the trees swaying in the wind without hearing the windows and walls rattle.

The SIP floor allows us to comfortably walk in stockings in the middle of winter. No need for expensive heated floors.

When we first arrive at the cabin, the SIP panels allow the space to heat up very quickly once the heat is turned on. Then, because of the panels, we are able to easily maintain the temperature and even back down a bit on the thermostats. We look forward to a cool place to spend the summer months due to the exceptional insulating qualities of SIPs!

I have every confidence that when storms may rage our SIP panel cabin will keep us safe and secure due to their strength!

~ Tom & Lynda Brandt, Cabin owners

Julkowski inc.

James 612-685-5291-ph Project Management

Rachel 612-845-6937-ph Design

• • • • •