

Participant information

Mike Bourquin Construction, Inc.
Mike Bourquin
521 10th Street
Brewster, MN 56119
Phone: 507-370-1388
Email: mbourquinconst@outlook.com
Website: www.mikebourquinconstruction.com

Category

Single Family Homes over 3,000 sq. ft.

Project information

Vis Residence
1621 Manfred Drive
Luverne, MN 56156

Date Completed:

November 2019

Total cost of project (exclusive of land):

\$632,550

Dimensions of building (all floors of multi-story building):

32' x 54' Main floor and lower level

Total sq. ft. of conditioned space:

3742 sq. ft.

Built By (*if different than applicant*)

Mike Bourquin Construction, Inc.
Mike Bourquin
521 10th Street
Brewster, MN 56119
Phone: 507-370-1388
Email: mbourquinconst@outlook.com
Website: www.mikebourquinconstruction.com

Panels Manufactured By: Company Name (members only):

Extreme Panel Technologies

Describe the end use of the building:

Single family dwelling.

How did SIP construction help you get this job?

When presented to the client that the comfort and air quality of their home would be achieved with SIPs and providing them with lower energy cost, giving the family a chance to enjoy their home at a high quality of living

SIP wall thickness and core material:

4" panels in garage, 4" panels to enclose mechanical room and 4" rim joists, 4" panels for the vaulted gable ends.

SIP roof thickness and core material:

4" panels to trayed ceilings

SIP foundation thickness and core material:

8" panels for the foundation (8' and 4' foundation panels)

SIP floor thickness and core material:

6" panels for the floor in some areas.

Describe the benefits of using SIPs on this project. Did SIPs help save time, labor, construction costs, or energy?

We feel that the use of SIPs integrated with the heating, cooling and ventilation system creates a system package to support a healthier home for our customer's family. Using that system saves in construction time by eliminating time and energy wasting steps in constructing the home. Also, the labor savings on installation of panels over traditional stick-frame, helps lower construction costs. We feel using our system also drives future energy costs down for the owner and supports a cleaner environment in general. We felt SIPs will be the answer to building homes that will last for generations to come!

Describe any innovative design elements or structural engineering involved:

SIPs built mechanical room for sound reduction, walk-in pantry thru cupboard pantry. South facing windows with larger overhang to help cut back Summer sun penetration.

Please list any certifications the project received, such as ENERGY STAR, LEED, National Green Building Standard, WELL, Passive House, Green Globes or local green building programs. Only list certifications that are completed:

Energy Star, Net Zero and Indoor Air Quality Plus certified.

HERS Index (required only for High Performance Category and recommended for residential projects):

36

Blower door test results (ACH50) (required only for High Performance Category and recommended for residential projects):

.95 ACH50 in the house only; 1.12 ACH50 with garage added in.

Energy use intensity in kBtu/ft² (required only for High Performance Category and recommended for commercial projects):

9.2 kBtu/ft²

Describe the HVAC system used on the project:

Heating is in-floor radiant heat in lower level, main floor and garage using a NTI Boiler. Using Detsen 30,000 BTU modulating-2 ton Outdoor heat pump. Cooling uses 1 ton unit.

Describe any other energy-saving materials used in the building envelope other than SIPs. List U-values of windows used and the U or R-value of any insulation materials. (judged only for High Performance Category)

We use low volume water fixtures with low volume toilets to save water consumption.

Please list any energy-efficient products or design features, such as lighting, hot water heating, appliances, passive solar (judged only for High Performance Category):

Throughout the home LED lights are used. Indirect water heater tied into NTI boiler-Panasonic. We felt that the family with 4 younger kids using bath fans with humidistat/motion module driven in 3 bathrooms will solve moisture issues and the garage we take out carbon monoxide gases. All Energy Star appliances were used throughout the house.

Please list any sustainable materials or design features not listed above, such as recycled materials, low-VOC finishes, landscaping, etc. (judged only for High Performance Category):

With SIPs being an air-tight home we use low VOC products such as Extreme Panel Technologies SIPs package, low VOC paints, low VOC floor products and our cabinetry has low VOC finishes. Creating a healthier home environment for our clients.