



## **Lower Your Utility Bills Forever**

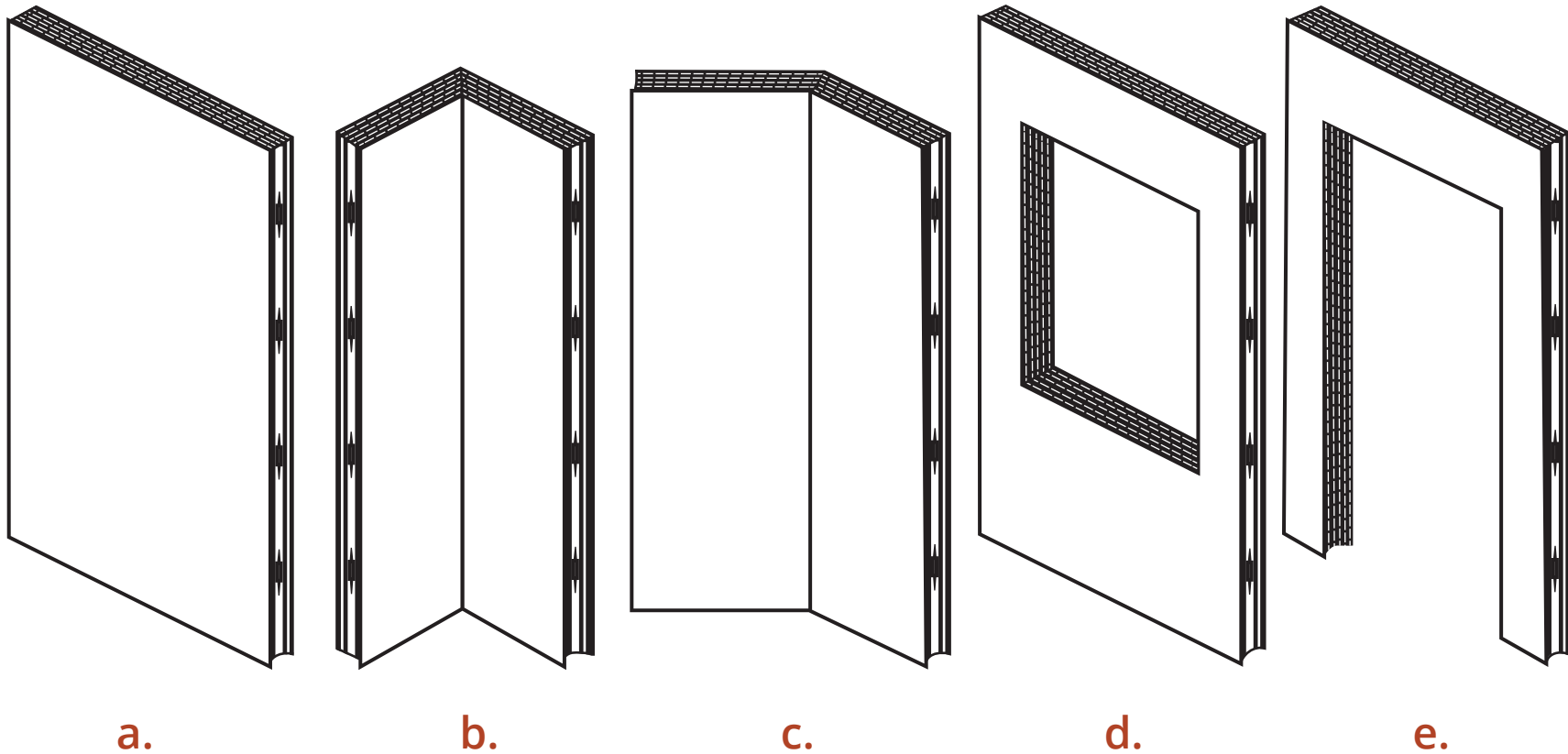
Along with having the lowest utility bills of all your neighbors, you'll have the safest, strongest, and most advanced built home of them all with Eco-Panel SIPs.

Beware the waste of common construction and live smarter, forever.

# Working with Eco-Panels & General Design Guidelines...



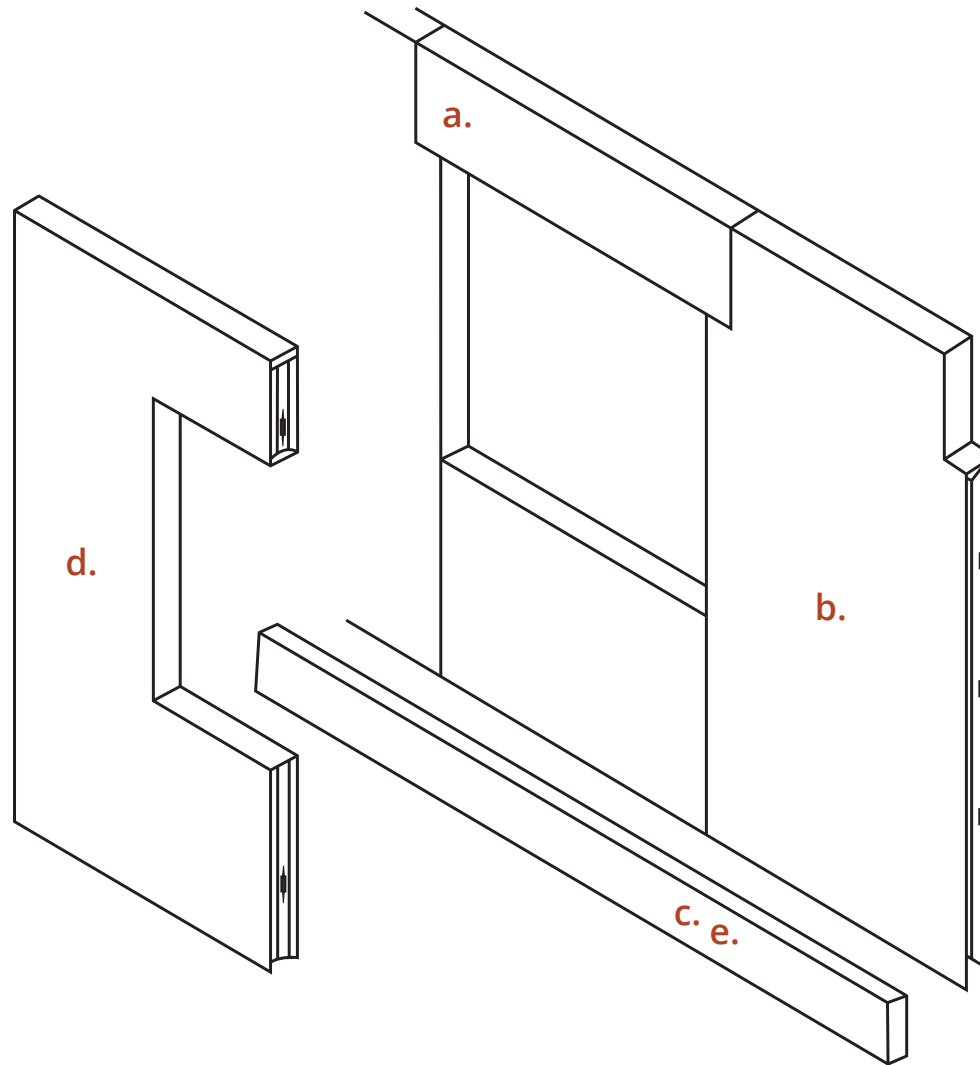
# Eco-Panels Standard Configurations



## Wall Panel Configurations

a. Standard Flat Panel | b. 90° Corner Panel | c. 135° Angle Panel | d. Window Panel | e. Door Panel

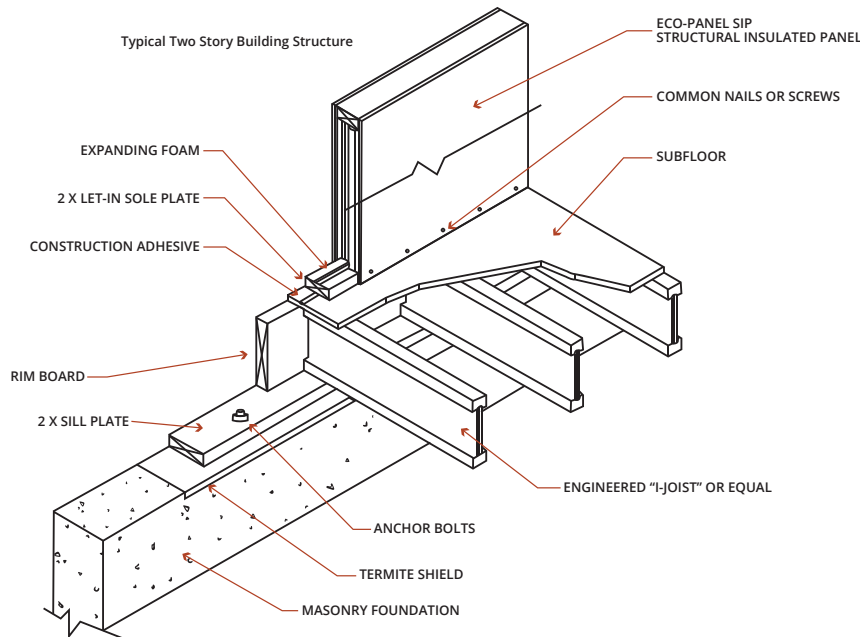
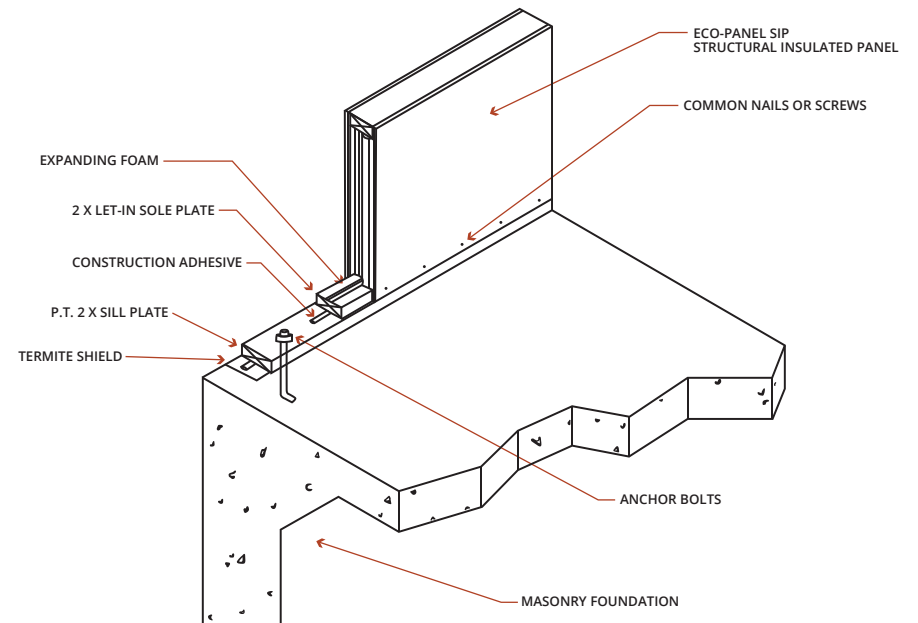
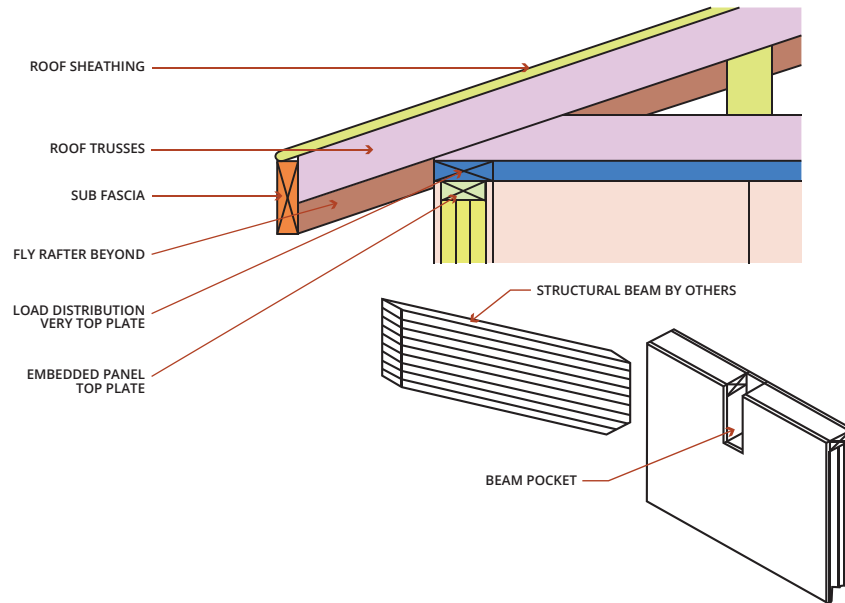
# Eco-Panels Special Configurations



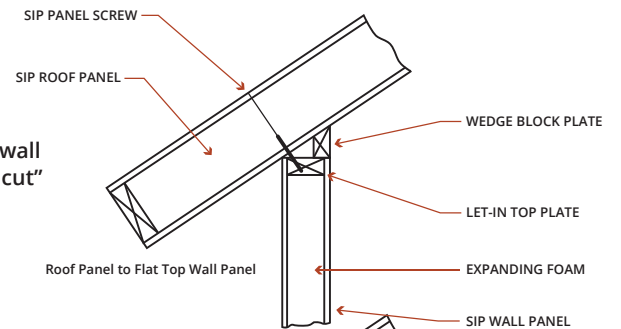
## Special Panel Configurations

a. Headers | b. Notched Panels | c. Box Beams | d. Split Window Panel | e. Foundation Band Panel

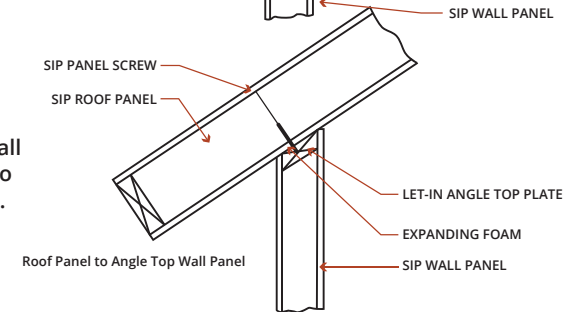
# Typical Section Details



Standard top of wall detail is "square cut"



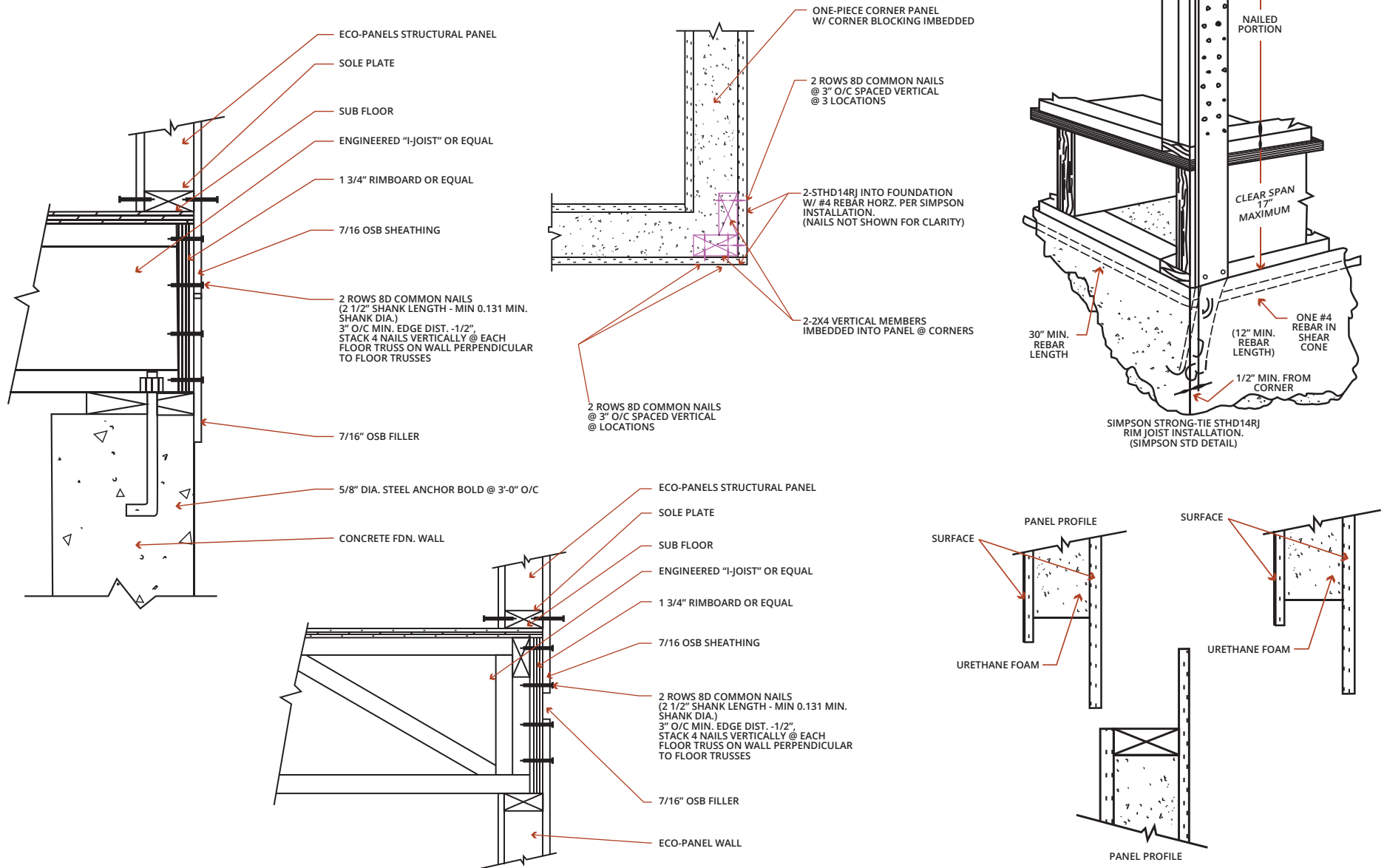
Premium top of wall detail is pitched to match roof pitch.



Always consult local code requirements and your local building professional before finalizing details.

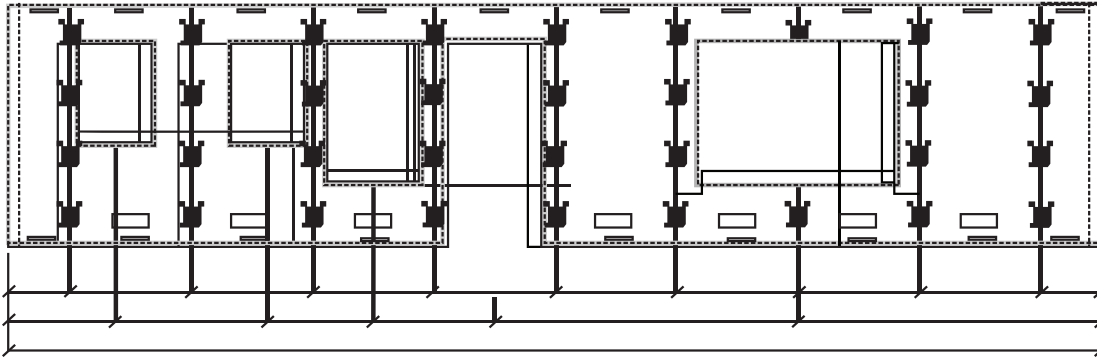
# "High Load" Misc. Section Details

(Often used in high wind/coastal/seismically active regions)



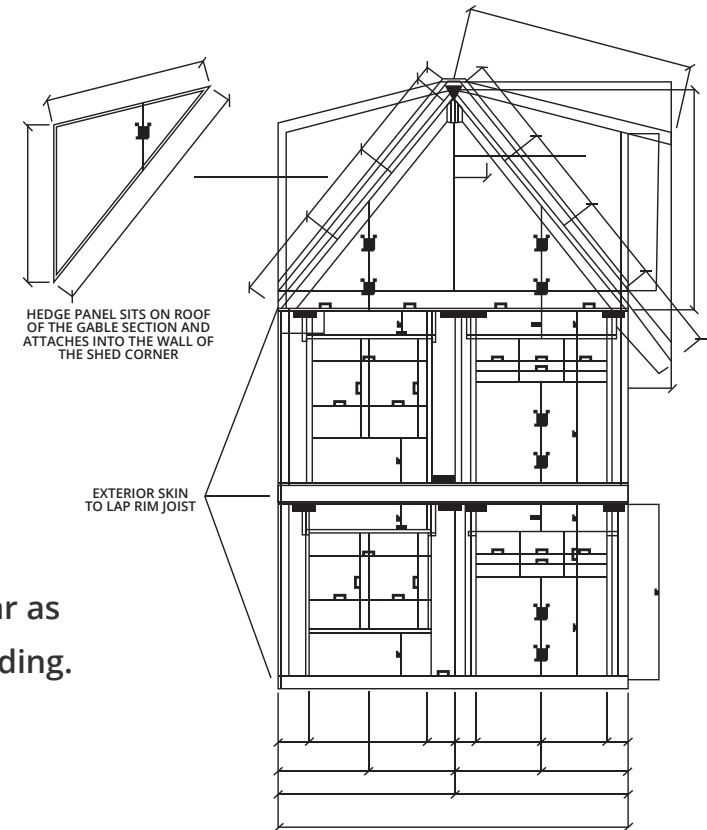
Always consult local code requirements and your local building professional before finalizing details.

# General Design Guidelines



## Points to Consider in Design for Wall Panels

- Structural guidelines for panels generally follow stick-frame guidelines as far as building code is concerned for wall heights and number of stories for a building.
- Note how windows do not have to be centered within a 4' panel
- Panels can be from 8"-48" wide, but narrower panels cost more/sqft
- Max window RO for 4' wide panel is 36" wide – else migrates to 2+ panels
- Door RO can be 38" wide (38"x83.5" would be standard exterior door)
- For large windows (5'+) headers should be at least 12" deep – may be >12" if wider spans
- Window openings wider than approx 6" would have dedicated headers and footers
- Try to keep panel height dimensions equal to even panel length – 8', 9', 10', 12' or similar
- Typical wall panel thickness is 4.5" (R26 at 52deg F).  
Some higher end homes, or colder regions, may choose to go with 6.5" thick panels (R40 at 52degF).
- Each leg on a corner panel typically varies from 8" to 24.
- Electrical boxes with chase running either up or down can be pre-installed as required.
- GENERALLY, if you can imagine it, we can find a way to make it work.



# General Design Guidelines, cont.

## Roof Panels

- If a home has an attic space, it is often opportunity to consider using traditional trusses and alternative insulation methods if budgets are tight.
- Selecting Eco-Panels should provide best thermal envelope, especially for vaulted spaces.
- Our 6.5" thick R40 (at 55deg F) rated panel is sufficient for most roof applications.
- When considering using our roof panels, roof panel spans between rafters are typically 2', 4' or 6', or could be 8' or 10' span if single panel running from ridge to eave and the horizontal "run" of the panel is in the range of 8'. The max panel length right now is 12'.
- Normally we do not recommend a panel overhang at eave or gable to exceed 2'.
- Roof panels TYPICALLY do not have cam locks other methods used.
- A long panel screw is supplied by Eco Panels for securing roof panels to structure.
- An expanding foam sealant (supplied by Eco Panels) or other type barrier should always be used on both the interior and exterior of panel joints, just as with wall panels.

## Floor Panels

- Not often used, though often very practical for elevated platforms or cantilevered floors.
- Top layer skin typ 5/8" OSB floor decking, bottom (ext) layer skin typ 1/2" CDX Plywood.
- Typically supported at 2' OC, though shorter or longer spans may be appropriate.



# How Do You Work with Eco-Panels?

- Client provides a drawing with dimensions, or a sufficient description, and Eco-Panels can provide an Estimate or a firm Proposal.
- To move forward client places a deposit, typically 60% though sometimes more depending upon delivery request or other. Discounts offered for long leadtimes, etc.
- Eco-Panels will create panel drawings and client is responsible for reviewing and approving for manufacture or asking for changes to plan.
- We understand that a client's schedule changes, so we will do our best to react to client's request, but since we only build panels when we know that we can ship them, client needs to keep EP informed of latest schedule.
- Leadtimes typically 8 12 weeks (ask to confirm).
  - 50-60% panel design effort - Eco-Panels creates a custom panel plan and reviews plan with client, often resulting in design changes for structure or cost efficiency.
  - 40-50% mfg queue time and actual mfg.
- Final payment due on product shipment.
- All structures assembled & checked prior to shipment!
- With local deliveries Eco-Panels can provide technical support at no charge at the time of delivery.
- We encourage clients to visit our factory in TN if they have a chance!





## **MORE ECONOMICAL.**

Lower utility, building, and labor costs with less waste.

## **STRONGER AND SAFER.**

2-3x stronger than conventional framing, no VOCs, and our foam doesn't melt at any temperature.

## **MORE SUSTAINABLE.**

Less wood, long term energy savings, and better for the environment.

### **Eco-Panels of Tennessee**

16580 Clay County Highway  
Red Boiling Springs, TN 37150  
800-356-2396  
[www.ecopanelsofTN.com](http://www.ecopanelsofTN.com)