



**BUILDING**

**ENCLOSURES**

*with*

**Open-Built® Systems**

**WALL AND ROOF**

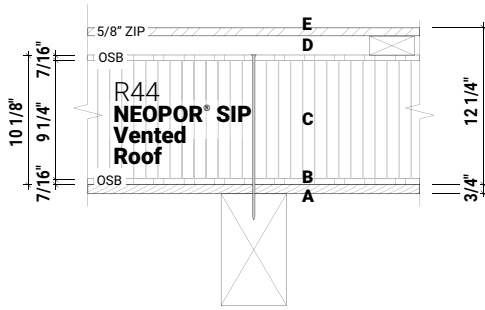
**TEKTONIKS**  
ADVANCED BUILDING COMPONENTS

from Bensonwood

# ROOF PANELS

R44

## NEOPOR® SIP Vented Roof



### A. TIMBER

Various

### B. INTERIOR FINISH

3/4" wood ceiling boards or other finish

### C. SIP

NEOPOR® EPS continuous foam core

### D. VENTILATION

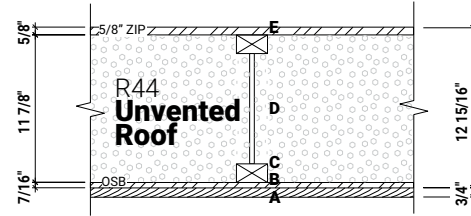
2x strapping 24" o.c.

### E. ROOF DECK

5/8" ZIP sheathing

R44

## 11 7/8" I-Joist Unvented Roof



### A. INTERIOR FINISH

3/4" wood ceiling boards or other finish

### B. AIR / VAPOR CONTROL LAYER

7/16" OSB structural grid

### C. RAFTER

11 7/8" Wood I-Joist

### D. INSULATION

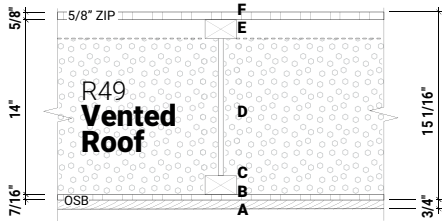
Dense pack cellulose

### E. ROOF DECK

5/8" ZIP sheathing

R49

## 14" I-Joist Vented Roof



### A. INTERIOR FINISH

3/4" wood ceiling boards or other finish

### B. AIR / VAPOR CONTROL LAYER

7/16" OSB structural grid

### C. RAFTER

14" Wood I-Joist

### D. INSULATION

Dense pack cellulose

### E. VENTILATION

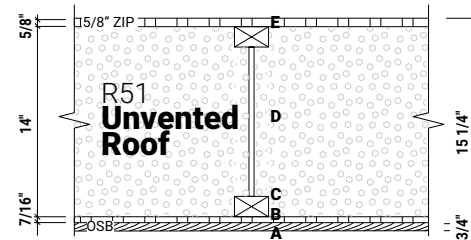
Top flange for air flow, cellulose held back with barrier

### F. ROOF DECK

5/8" ZIP sheathing

R51

## 14" I-Joist Unvented Roof



### A. INTERIOR FINISH

3/4" wood ceiling boards or other finish

### B. AIR / VAPOR CONTROL LAYER

7/16" OSB structural grid

### C. RAFTER

14" Wood I-Joist

### D. INSULATION

Dense pack cellulose

### E. ROOF DECK

5/8" ZIP sheathing

**Note:** Factory installed finished ceilings are available.

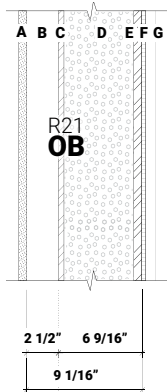
# WALL PANELS

The calculated thermal values are clear wall R-values.

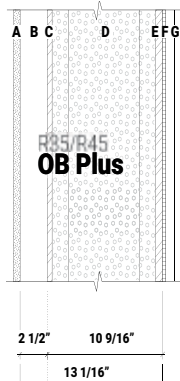
## OpenBuilt®

The OpenBuilt wall system separates structural and thermal layers from the interior. This allows for easy electrical, plumbing and wiring work in the future.

R21 | R31\*  
**Openbuilt**



R35 | R45\*  
**OpenBuilt Plus**



**A. INTERIOR FINISH**  
5/8" thickness

**B. SERVICE LAYER**  
2 1/2" Run mechanical systems and structural connections

\*Potential increased R-value with additional insulation

**C. AIR / VAPOR CONTROL LAYER**

7/16" OSB structural grid

**D. STRUCTURAL FRAMING & INSULATION @ 24" O/C**

**OB Wall** - 5 1/2" dense pack cellulose

**OB+ Wall** - 9 1/2" dense pack cellulose

**E. WEATHER RESISTANT BARRIER**

5/8" ZIP sheathing

**F. RAINDSCREEN**

1/4" drainage plane (optional)

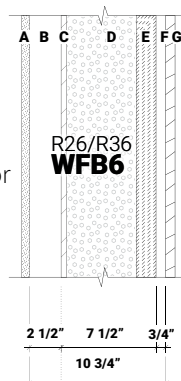
**G. EXTERIOR CLADDING**

Custom

## OpenBuilt® Wood Fiberboard

The OpenBuilt Wood Fiberboard walls use dimensional lumber studs and vapor-open exterior wood fiberboard for continuous insulated sheathing. PHlex can be modified for Passive House performance.

R26 | R36\*  
**Wood Fiberboard 6**



**A. INTERIOR FINISH**  
5/8" thickness

**B. SERVICE LAYER**

**WFB6/WFB8** - 2 1/2" Run mechanical systems and structural connections

**WFB PHlex** - Up to 3 1/2"

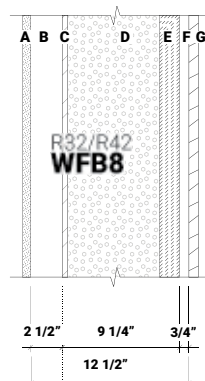
\*Potential increased R-value with additional insulation

**C. AIR / VAPOR CONTROL LAYER**

7/16" OSB structural grid

**D. STRUCTURAL FRAMING & INSULATION @ 24" O/C**

R32 | R42\*  
**Wood Fiberboard 8**



**WFB6** - 5 1/2" dense pack cellulose

**WFB8** - 7 1/4" dense pack cellulose

**WFB PHlex** - Phlexible dimensions

**E. WEATHER RESISTANT BARRIER**

**WFB6/WFB8** - R5 1 9/16" thick wood fiberboard

**WFB PHlex** - Phlexible dimensions

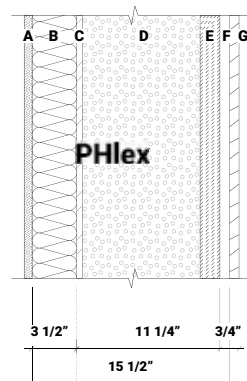
**F. RAINDSCREEN**

3/4" drainage plane

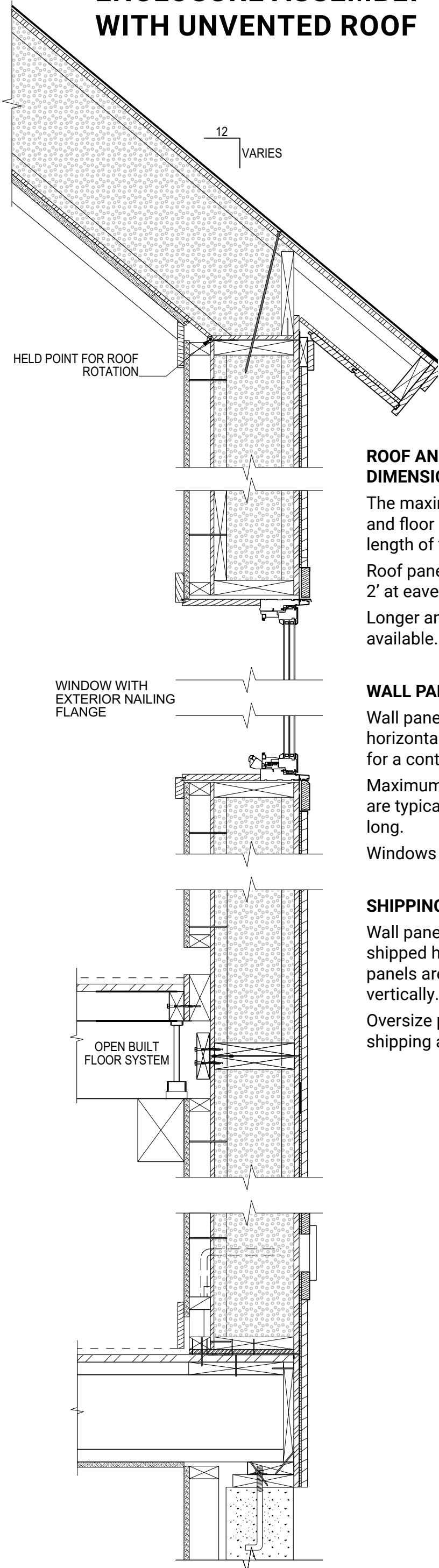
**G. EXTERIOR CLADDING**

Custom

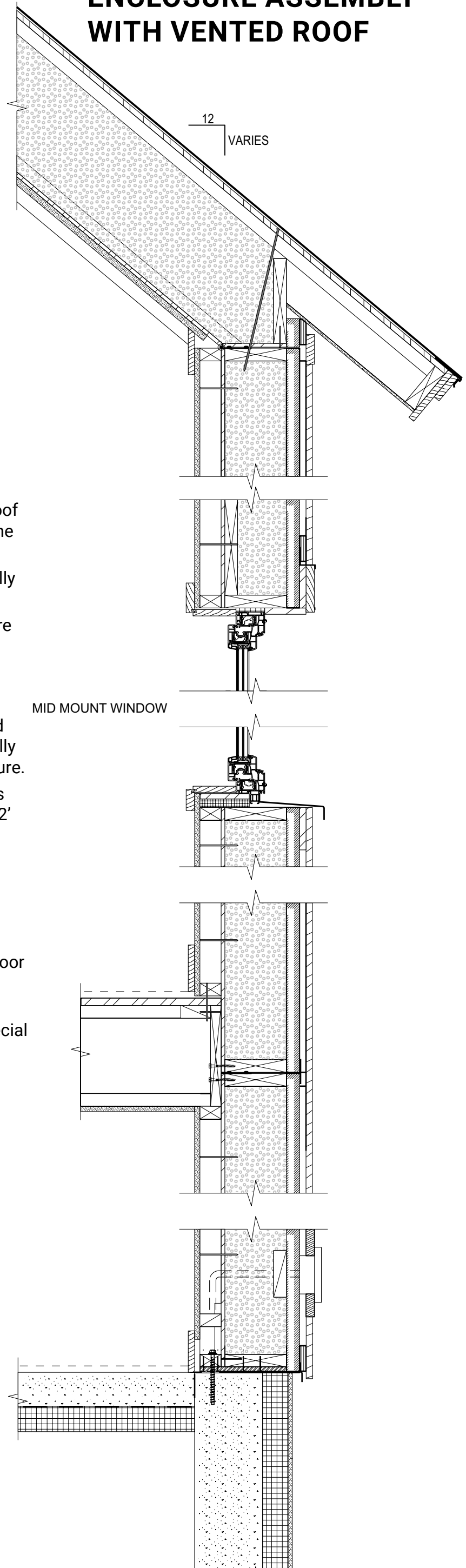
R53+  
**WFB PHlex**



# ENCLOSURE ASSEMBLY WITH UNVENTED ROOF



# ENCLOSURE ASSEMBLY WITH VENTED ROOF



## ROOF AND FLOOR PANEL DIMENSIONS

The maximum dimensions for roof and floor panels are 8' wide by the length of the rafter/joist.

Roof panel overhangs are typically 2' at eaves and 1' at rakes.

Longer and shorter overhangs are available.

## WALL PANEL DIMENSIONS

Wall panels are typically oriented horizontally, and stacked vertically for a continuous thermal enclosure.

Maximum wall panel dimensions are typically 9' - 8" tall by up to 32' long.

Windows are factory installed.

## SHIPPING

Wall panels are wrapped and shipped horizontally. Roof and floor panels are wrapped and shipped vertically.

Oversize panels may require special shipping arrangements.

# BENEFITS TO ARCHITECTS AND BUILDERS

PRECISE MANUFACTURING. IMPROVED COST MANAGEMENT

WALL | ROOF | FLOOR | WINDOW  
**BUILDING ENCLOSURES**

TIMBERFRAME | MASS TIMBER  
**TIMBER FABRICATION**

DOORS | TRIM | STAIRS | CEILING PANELS  
**MILLWORK COMPONENTS**

## **VIRTUAL FABRICATION**

The direct line from design to fabrication reduces the possibility of error by providing an additional layer of quality control before fabrication begins.

## **CNC AUTOMATION**

Automated production results in predictable building components and structural elements.

## **LESS WASTE**

Decreasing waste through volume optimization and recycling reduces the environmental impact of construction.

## **PRECISE MANUFACTURING**

Accurate off-site manufacturing results in increased productivity, improved quality control, and improved cost management.

## **SCALED BUILDING EFFICIENCIES**

Transforms the traditional building cycle by removing time and costs from development and construction.

## **THIRD PARTY CERTIFICATION**

Because our building systems are built off-site, we use a third party inspection agency, TR Arnold, to certify our QC program, processes and our products. These reports are available to the entire project team. TR Arnold and our in house quality control staff conduct regular inspections.

## **YOUR DESIGN**

TEKTONIKS Advanced Building Systems benefits building professionals who want to take advantage of off-site fabrication. Designers, engineers and developers can utilize prefabricated solutions without the need to invest in heavy equipment. Building enclosure systems, timberframe and mass timber cutting, and millwork are precision built using CNC machinery for precision and durability.

## **A BENSONWOOD BRAND**

Tektoniks benefits from Bensonwood's 40+ years of research and development. Our goal? Make it easier for more people to build with high quality and high performance building methods and materials.

**TEKTONIKS**  
ADVANCED BUILDING COMPONENTS

Contact us to discuss how to use Tektoniks advanced building components for your next project.

(603) 756-3600 or [www.tektoniks.com](http://www.tektoniks.com)