

# MAINE COAST WALDORF HIGH SCHOOL

## BUILDING ENVELOPE

CONTINUOUS  
AIRTIGHT  
LAYER (RED)

R-61 NORTH  
WALL  
INSULATION

R-17 SLAB  
INSULATION

SOLAR PANELS

R-55 ROOF  
INSULATION

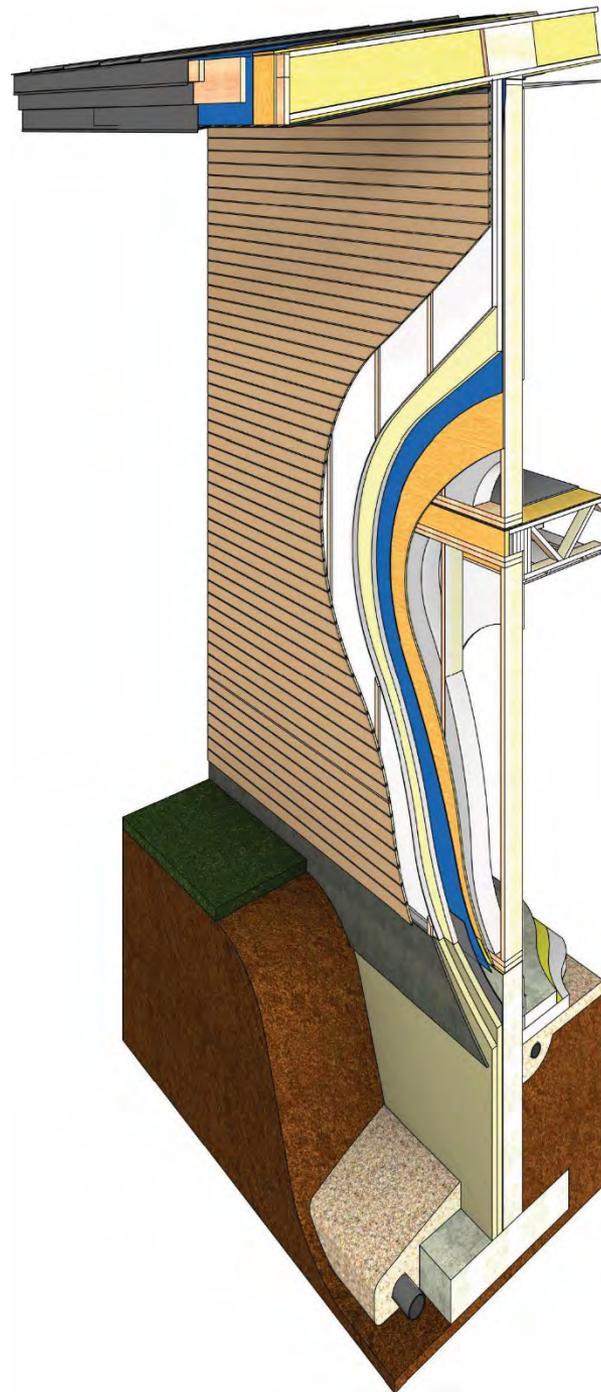
TRIPLE GLAZED  
WINDOWS

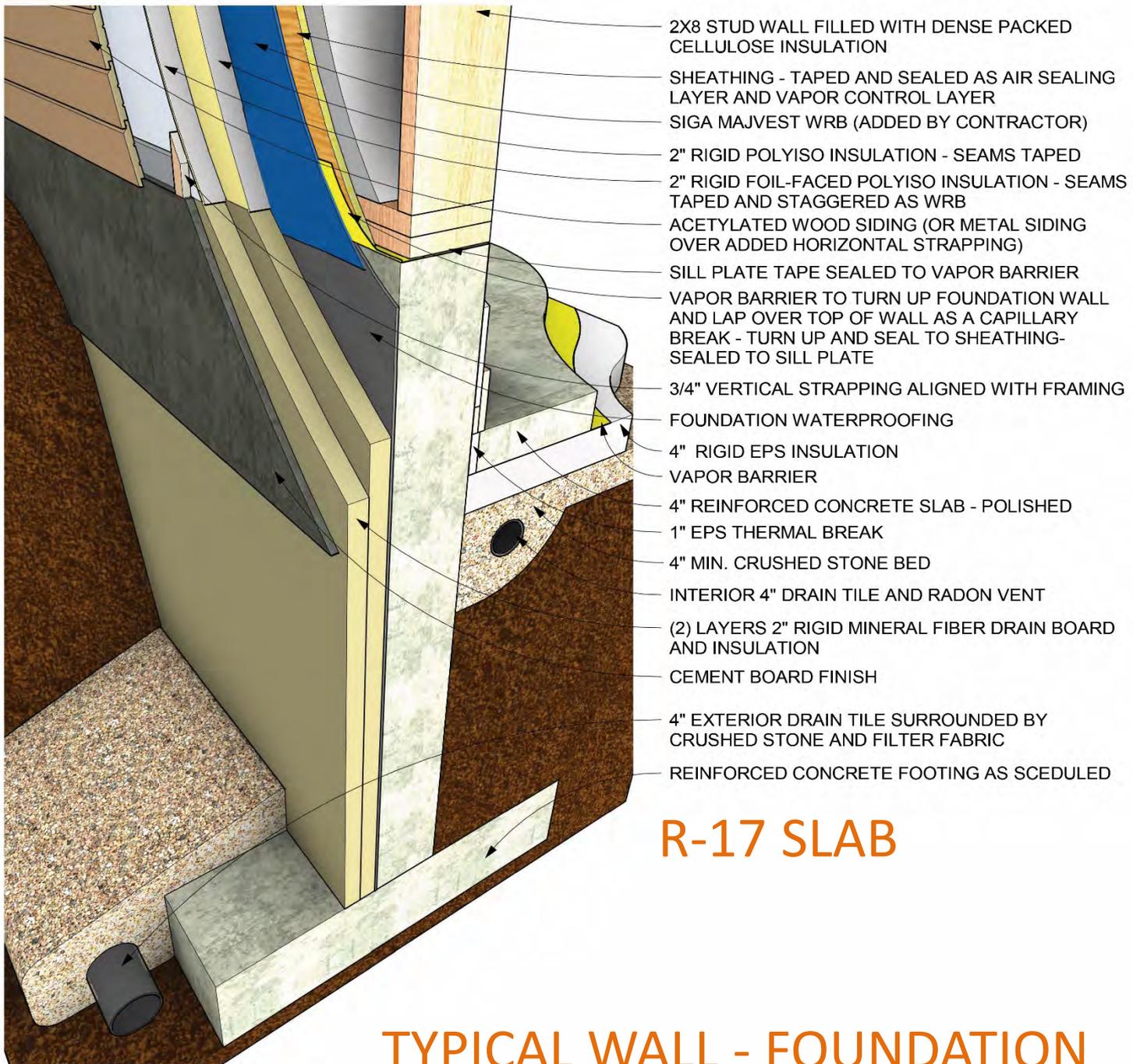
R-51 WALL  
INSULATION



# SOUTH, EAST & WEST WALLS (R-51)

- ◎ siding
- ◎ ¾" strapping
- ◎ 2" foil faced rigid insulation (taped)
- ◎ 2" rigid insulation
- ◎ weather barrier (majvest by siga)
- ◎ sheathing
- ◎ 2x8 wood stud, Fill cavity with dense-packed cellulose
- ◎ 5/8" gwb



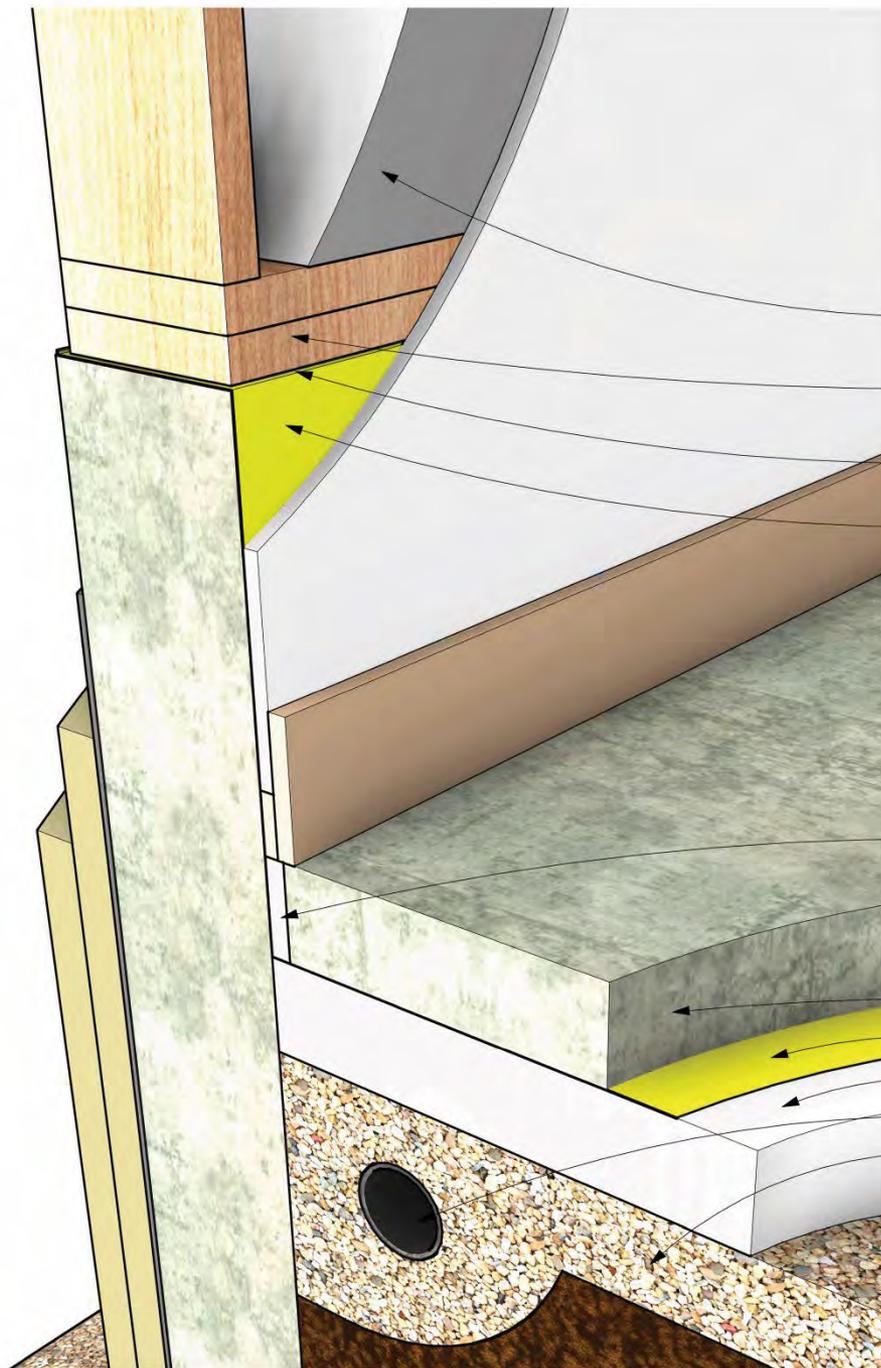


- 2X8 STUD WALL FILLED WITH DENSE PACKED CELLULOSE INSULATION
- SHEATHING - TAPED AND SEALED AS AIR SEALING LAYER AND VAPOR CONTROL LAYER
- SIGA MAJVEST WRB (ADDED BY CONTRACTOR)
- 2" RIGID POLYISO INSULATION - SEAMS TAPED
- 2" RIGID FOIL-FACED POLYISO INSULATION - SEAMS TAPED AND STAGGERED AS WRB
- ACETYLATED WOOD SIDING (OR METAL SIDING OVER ADDED HORIZONTAL STRAPPING)
- SILL PLATE TAPE SEALED TO VAPOR BARRIER
- VAPOR BARRIER TO TURN UP FOUNDATION WALL AND LAP OVER TOP OF WALL AS A CAPILLARY BREAK - TURN UP AND SEAL TO SHEATHING-SEALED TO SILL PLATE
- 3/4" VERTICAL STRAPPING ALIGNED WITH FRAMING
- FOUNDATION WATERPROOFING
- 4" RIGID EPS INSULATION
- VAPOR BARRIER
- 4" REINFORCED CONCRETE SLAB - POLISHED
- 1" EPS THERMAL BREAK
- 4" MIN. CRUSHED STONE BED
- INTERIOR 4" DRAIN TILE AND RADON VENT
- (2) LAYERS 2" RIGID MINERAL FIBER DRAIN BOARD AND INSULATION
- CEMENT BOARD FINISH
- 4" EXTERIOR DRAIN TILE SURROUNDED BY CRUSHED STONE AND FILTER FABRIC
- REINFORCED CONCRETE FOOTING AS SCEDULED

## R-17 SLAB

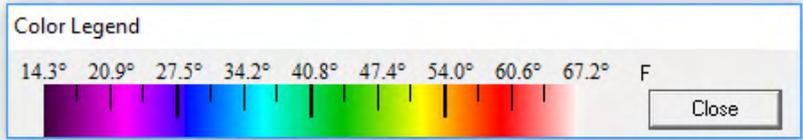
# TYPICAL WALL - FOUNDATION

# R-51 WALL

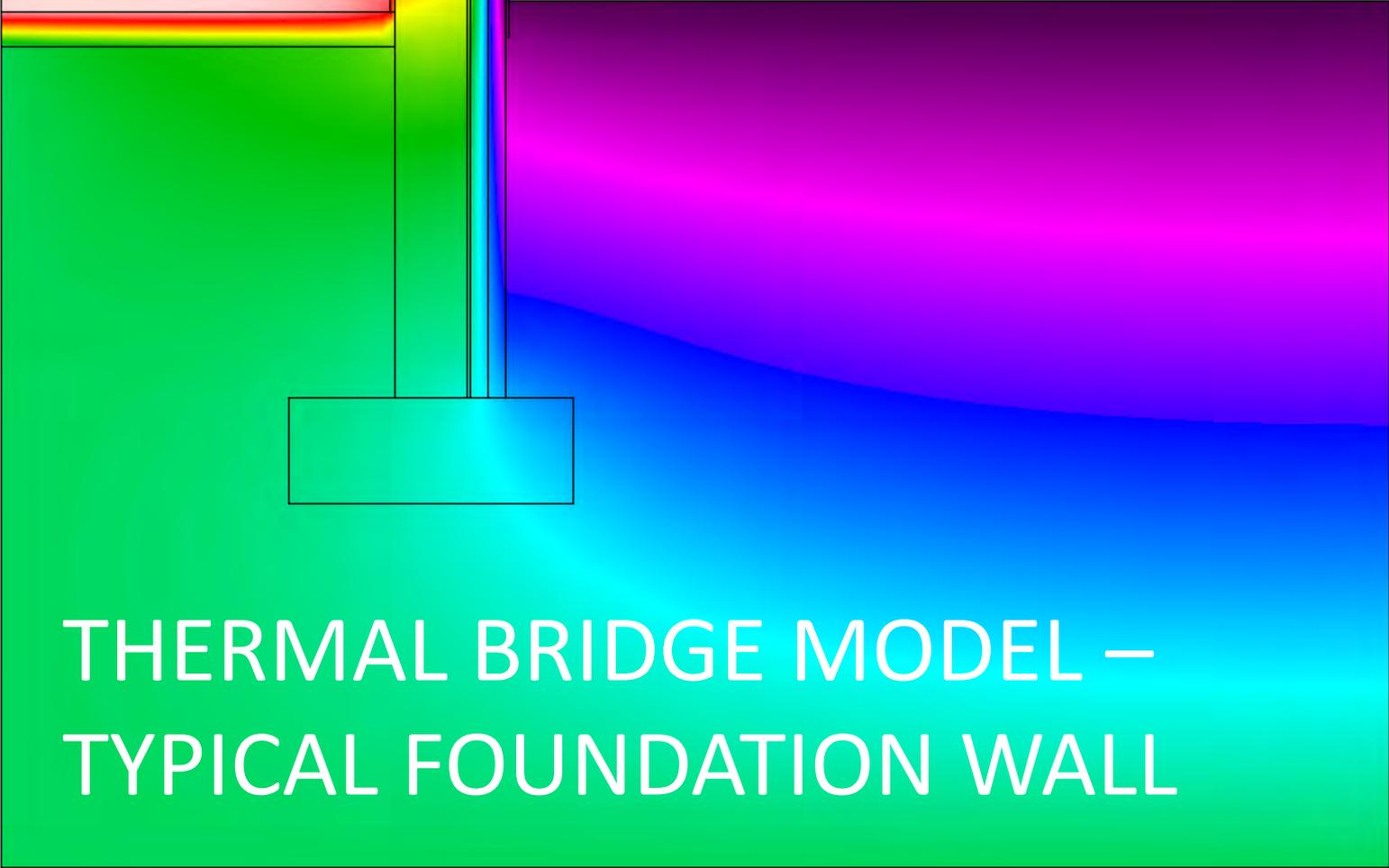


- 2X8 STUD WALL FILLED WITH DENSE PACKED CELLULOSE INSULATION
- SILL PLATE TAPE SEALED TO CAPILLARY BREAK/VAPOR BARRIER
- SILL SEAL GASKET - TAPED AND SEALED TO VAPOR BARRIER
- VAPOR BARRIER TO TURN UP FOUNDATION WALL AND LAP OVER TOP OF WALL AS A CAPILLARY BREAK - TURN UP AND SEAL TO SHEATHING-SEALED TO SILL PLATE
- 1" EPS THERMAL BREAK
- 4" REINFORCED CONCRETE SLAB - POLISHED
- VAPOR BARRIER
- 4" TYPE IX RIGID EPS INSULATION
- INTERIOR 4" DRAIN TILE AND RADON VENT
- 4" MIN. CRUSHED STONE BED

# TYPICAL WALL - FOUNDATION



PSI VALUE = 0.077 BTU/HR/FT





STRUCTURA

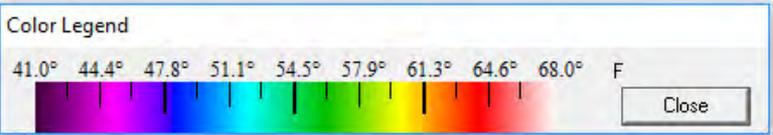
Advantech  
CREATING

Advantech

SIGA-WIGLUV

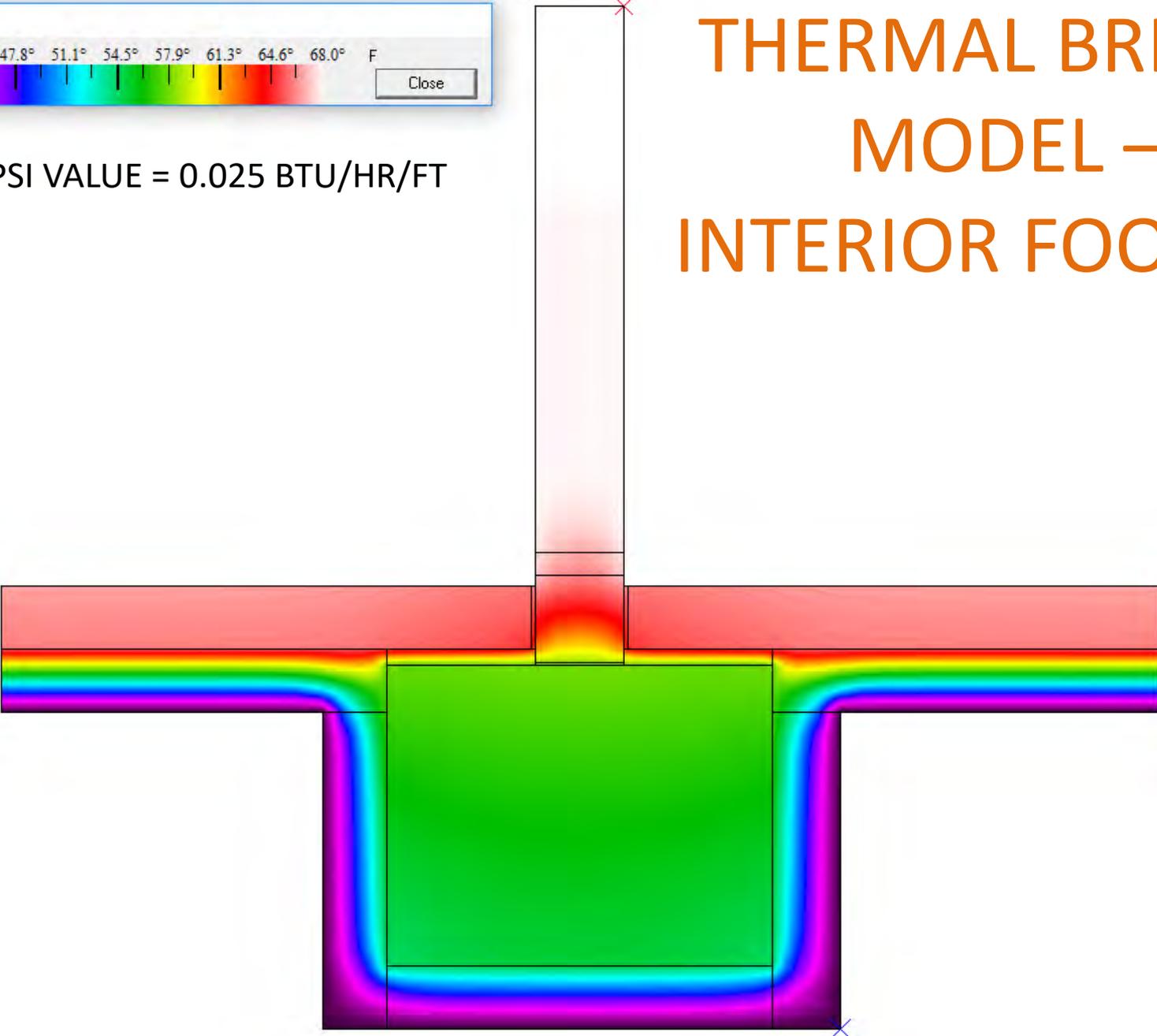
SIGA-WIGLUV





PSI VALUE = 0.025 BTU/HR/FT

# THERMAL BRIDGE MODEL – INTERIOR FOOTING











# R-51 WALL

GYPSUM WALL BOARD  
BASE TRIM AS SCHEDULED

2X8 STUD WALL FILLED WITH DENSE PACKED  
CELLULOSE INSULATION

SILL PLATES - SEALED TO DECK

FLOORING FINISH AS SCHEDULED

3/4" FLOOR SHEATHING

1 3/4" X 7 1/4" LVL RIM JOIST

CAVITIES BETWEEN AND AROUND JOISTS  
FILLED WITH DENSE PACKED CELLULOSE

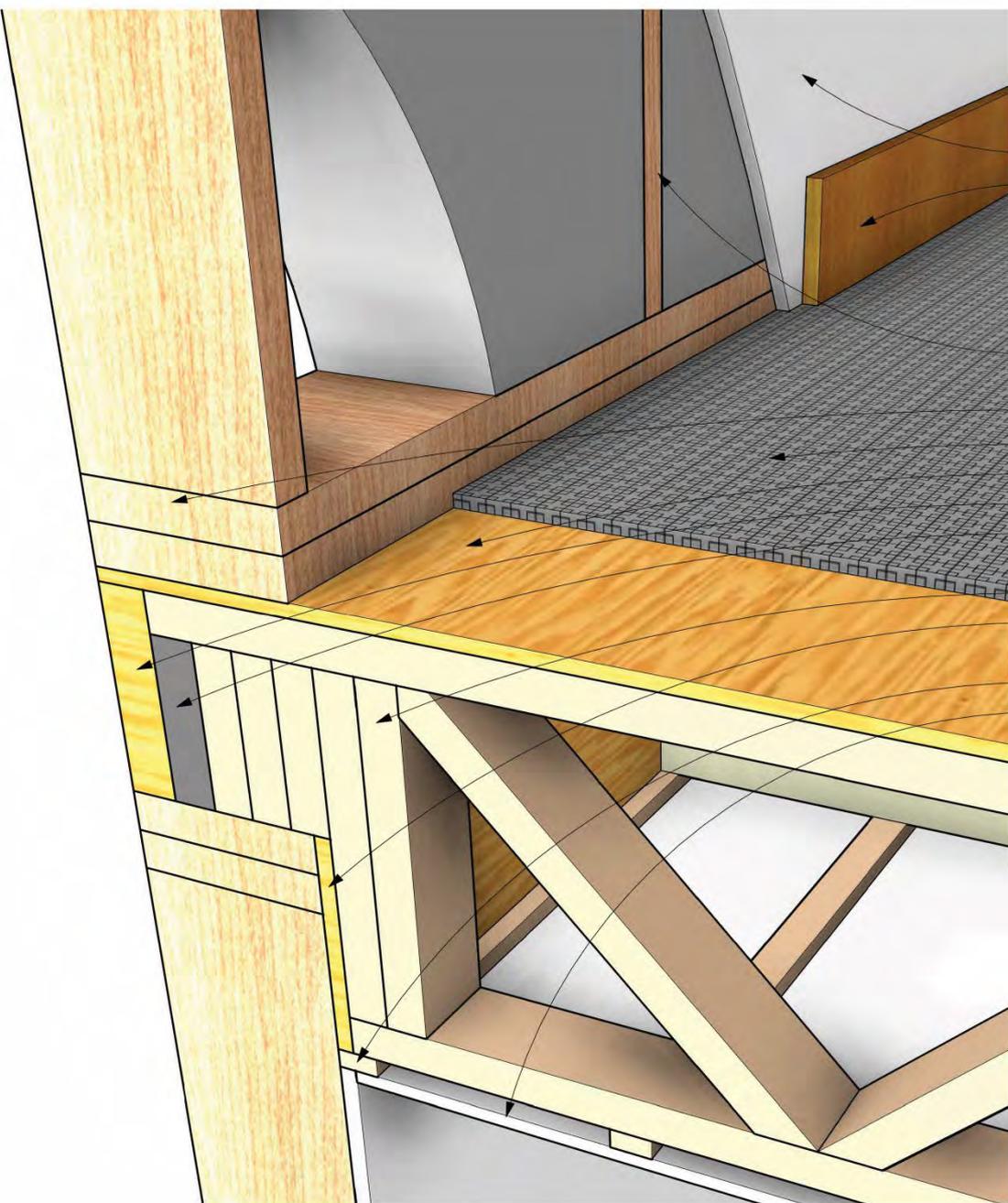
TOP BEARING OPEN WEB WOOD JOISTS

FIELD APPLIED SHEATHING TO CONTAIN CELLULOSE  
AT TOP OF WALL

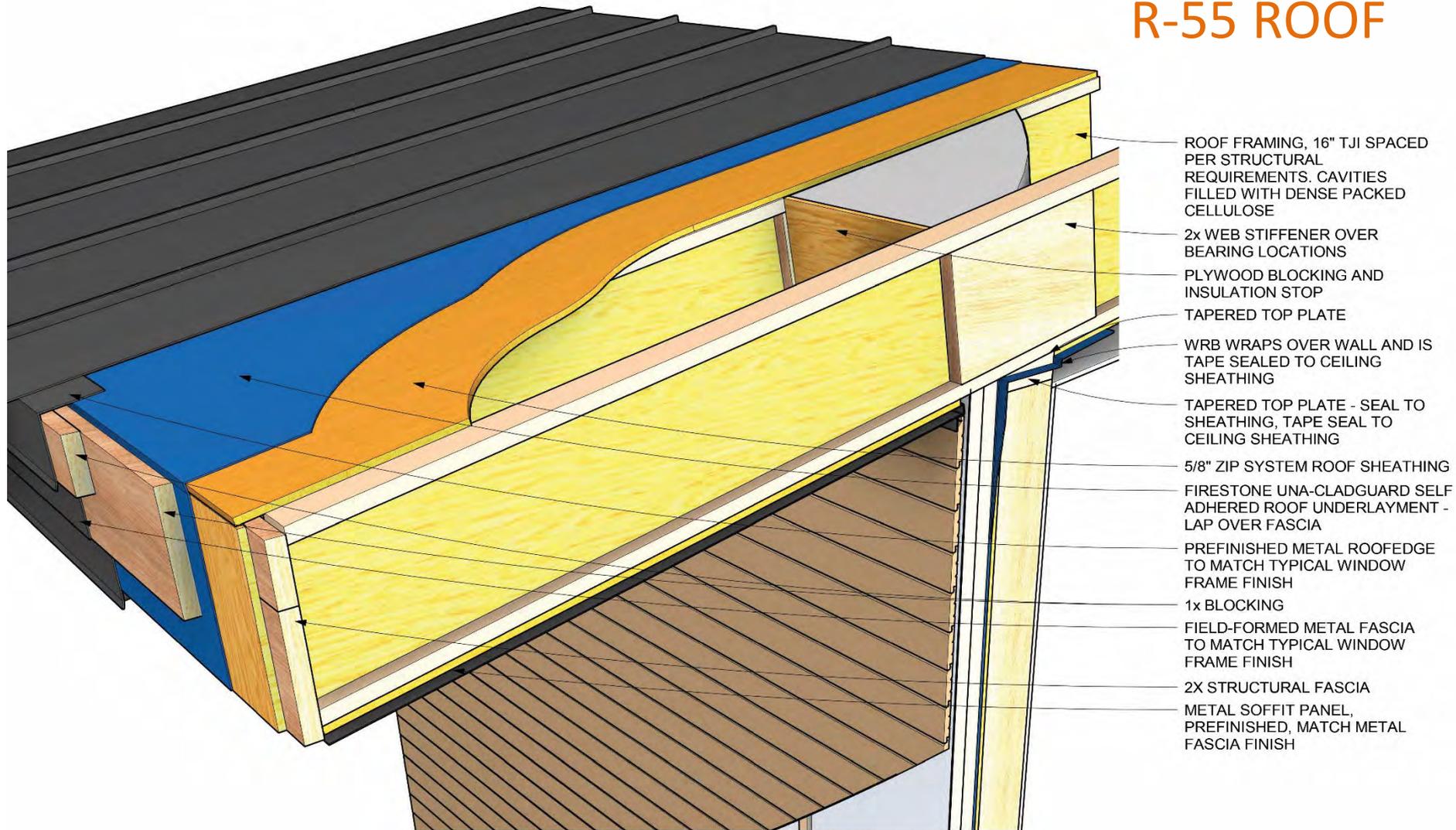
3/4" STRAPPING

GYPSUM WALL BOARD FINISHED CEILING

## TYPICAL WALL – AT FLOOR

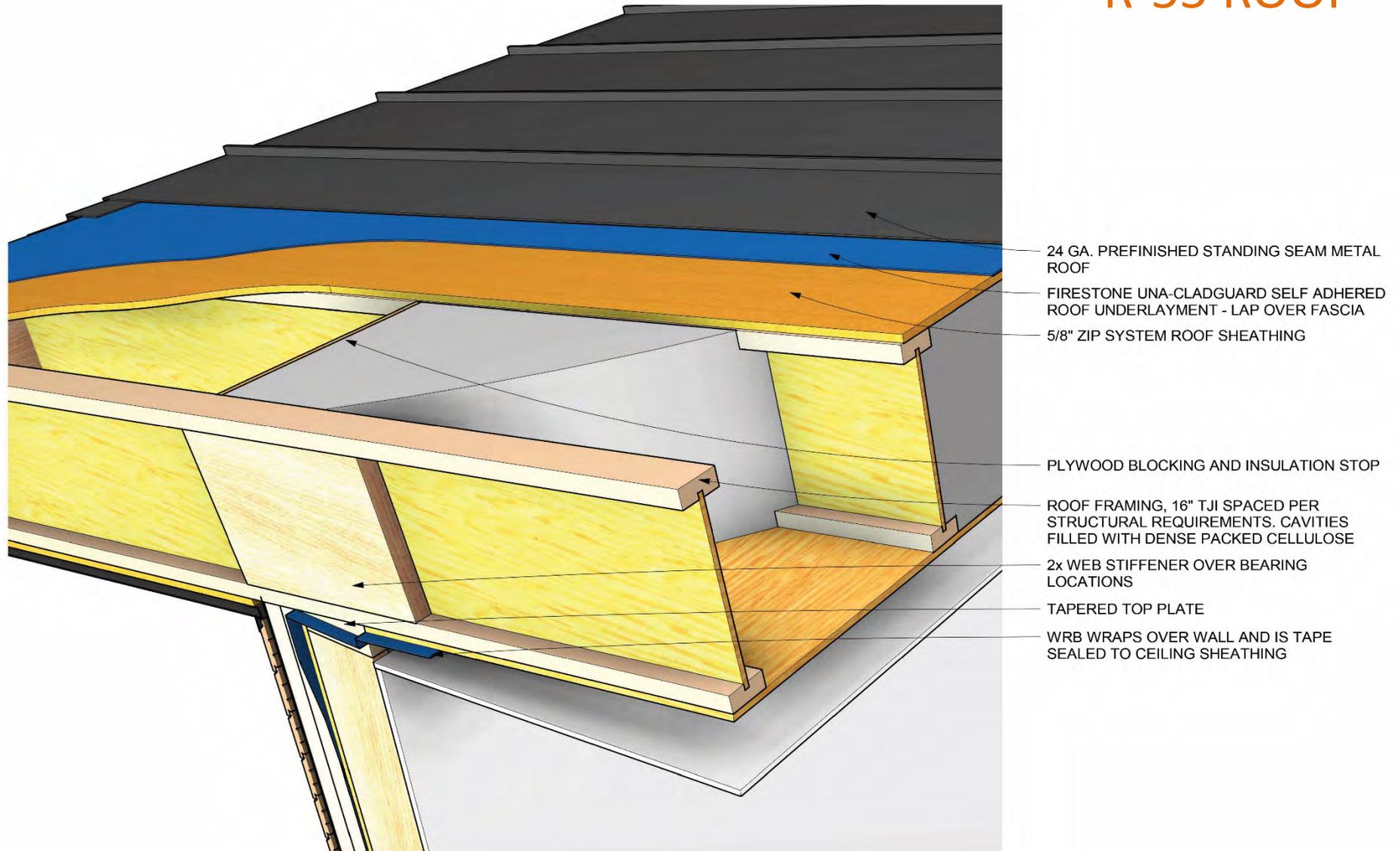


# R-55 ROOF



TYPICAL WALL – ROOF EXTERIOR

# R-55 ROOF



TYPICAL WALL – ROOF INTERIOR





STRUCTURAL 1

Advantech

Advantech

OSB  
LIFE TIME  
ESR-1788

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GROVE

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