



# R4 HP

## High-Performance Exterior Insulsheathing

BP's R-4 HP combines wood fibre and expanded polystyrene for a perfect blend of superior advantages. An exterior insulsheathing that offers enhanced structural strength, true R-4 thermal resistance, added efficiency and uncompromised quality.



# 4 reasons to build with our new R-4 HP exterior insulsheathing

## 1 Excellent rigidity

New R-4 HP offers the same rigidity as a 13 mm (1/2 in.) wood fibre panel, without its heavy weight. BP breaks new ground with its **11 mm (7/16 in.) wood fibre panel that's as rigid as a 13 mm panel (1/2 in.)**. A lightweight product that's easy to handle and install.

- Increased rigidity without additional weight
- Easy to position on wall partition
- No additional support needed



Once combined with wood fibre, the 17 mm (11/16 in.) Type II expanded polystyrene panel provides maximum insulation performance.



BP's 11 mm (7/16 in.) high-performance wood fibre panel offers rigidity, permeance, soundproofing and light weight.

## 2 True R-4 insulation

A panel that lives up to its name. BP made sure that the manufacturing parameters of both wood fibre panels and BP's **white expanded polystyrene Type II panels** met the precision standards. Once the panels are fixed together, they create a **true R-4 thermal resistance**. You can trust BP's R-4 HP, measured and tested!

- True R-4 thermal resistance
- Covers thermal bridges
- Proven insulation performance, measured and tested

## 3 More than an insulation panel

R-4 HP offers excellent sound attenuation properties and a higher water vapour permeance rate compared to other panels on the market, so the wall cavity is kept really dry. This also assures that only high quality houses are built. BP's R-4 HP is made of 98% recycled and local products, and **helps qualify for LEED® credits**.

- Offers superior soundproofing
- Maintains drier wall cavities
- Helps qualify for LEED® credits

# 4 Bigger and better R-4 HP!

New energy efficiency rules have changed construction methods. As a result, contractors must deal with higher costs... and every penny counts.

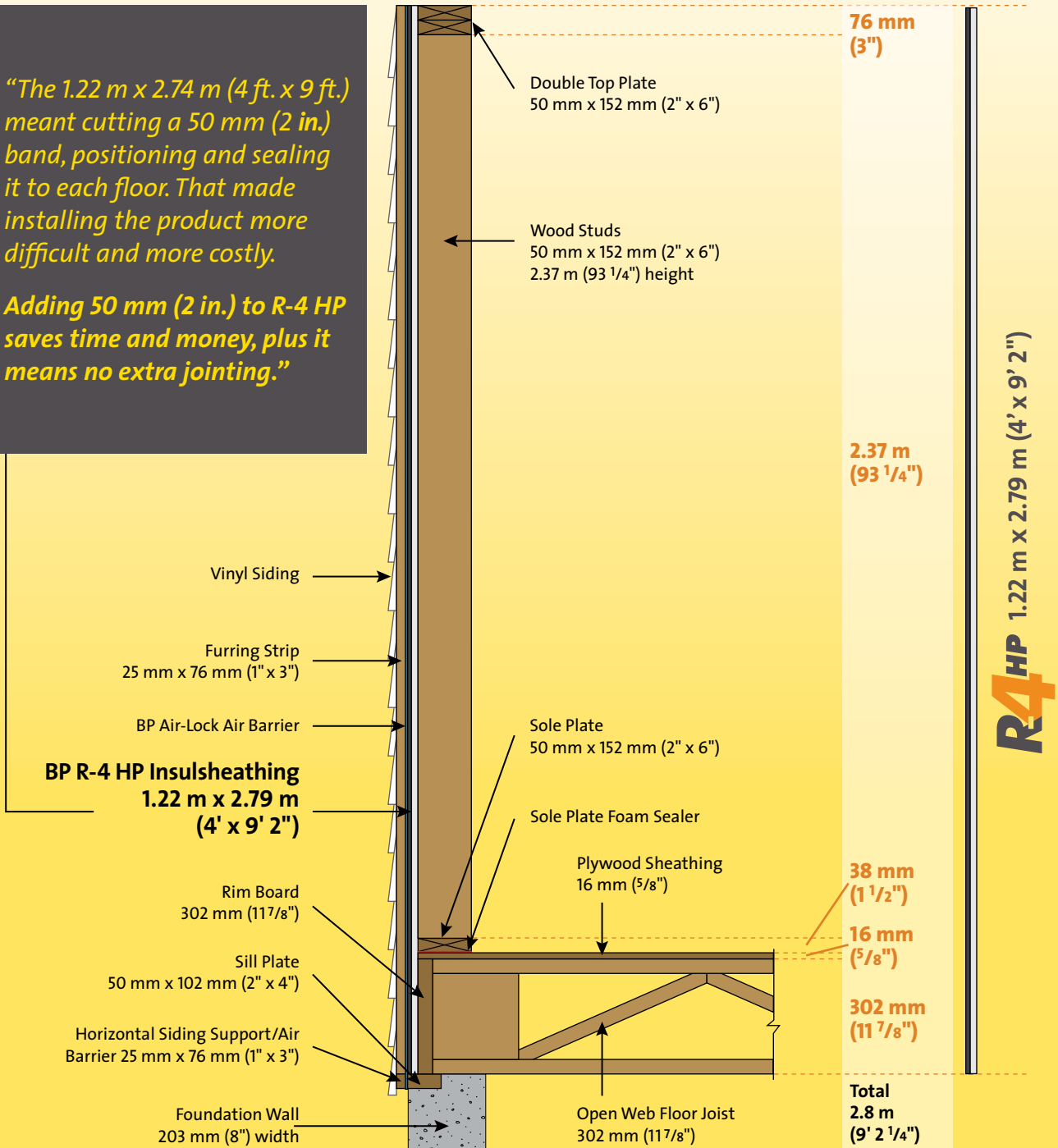
BP now introduces a 1.22 m x 2.79 m (4 ft. x 9 ft. 2 in.) R-4 HP. The simple addition of 2 inches **makes**

**installation faster, easier and more efficient** because there's no jointing. See for yourself!

- Added efficiency
- Uncompromised quality
- Jointless installation
- Quick installation
- Easy handling

*"The 1.22 m x 2.74 m (4 ft. x 9 ft.) meant cutting a 50 mm (2 in.) band, positioning and sealing it to each floor. That made installing the product more difficult and more costly.*

*Adding 50 mm (2 in.) to R-4 HP saves time and money, plus it means no extra jointing."*



# Specifications and physical properties

SPECIFICATIONS	Metric	Imperial
NOMINAL THICKNESS	28.6 mm	1 1/8 in.
> POLYSTYRENE LAYER	17 mm	11/16 in.
> WOOD FIBRE LAYER	11 mm	7/16 in.
<b>PRODUCT CODE*</b>		
SIZE	<b>B4H0448</b> 1.22 m x 2.44 m	4 ft. x 8 ft.
	<b>B4H0449</b> 1.22 m x 2.74 m	4 ft. x 9 ft.
	<b>B4H044110</b> 1.22 m x 2.79 m	4 ft. x 9 ft. 2 in.
<b>COVERAGE / PANEL</b>		
(4 ft. x 8 ft.)	<b>B4H0448</b> 2.97 m <sup>2</sup>	32 ft. <sup>2</sup>
(4 ft. x 9 ft.)	<b>B4H0449</b> 3.34 m <sup>2</sup>	36 ft. <sup>2</sup>
(4 ft. x 9 ft. 2 in.)	<b>B4H044110</b> 3.41 m <sup>2</sup>	36.675 ft. <sup>2</sup>
<b>PALLETS / FULL TRUCKLOAD</b>		
(4 ft. x 8 ft.)	<b>B4H0448</b> 24 (26 if truck closed)	
(4 ft. x 9 ft.)	<b>B4H0449</b> 20	
(4 ft. x 9 ft. 2 in.)	<b>B4H044110</b> 20	

PHYSICAL PROPERTIES	Metric	Imperial
Thermal resistance (ASTM C518)**		
> COMPOSITE SHEATHING BOARD	RSI 0.71	R 4.03
Transverse load (ASTM C209)		
> COMPOSITE SHEATHING BOARD	115 N	26 lbf
Water absorption (ASTM C209)		
> COMPOSITE SHEATHING BOARD	≤ 4 %	
Water vapour permeance (ASTM E96)**		
> Wood fibre	≤ 2000 ng/(Pa·s·m <sup>2</sup> )	≤ 35 perms
> Polystyrene	≤ 200 ng/(Pa·s·m <sup>2</sup> )	≤ 3.5 perms
> COMPOSITE SHEATHING BOARD	≤ 200 ng/(Pa·s·m <sup>2</sup> )	≤ 3.5 perms

## APPLICABLE STANDARDS

Wood fibre	CAN/ULC-S706-09 Type II, Class 3, Grade 1
Polystyrene	CAN/ULC-S701-11 Type II

## LISTINGS

CCMC 12044-L, CCMC 12895-L

\* This code refers to the item number. Visit [www.bpcan.com](http://www.bpcan.com) for the Technical Data Sheet.

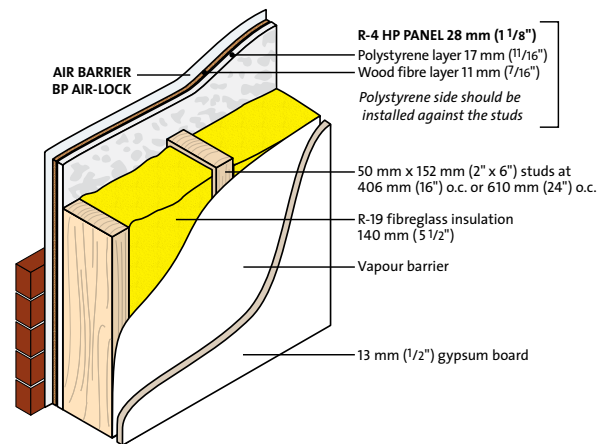
\*\* Performances measured in an independant laboratory. Reports available upon request.

# Application instructions

For more information on R-4 HP installation, visit our website.

# Typical assembly

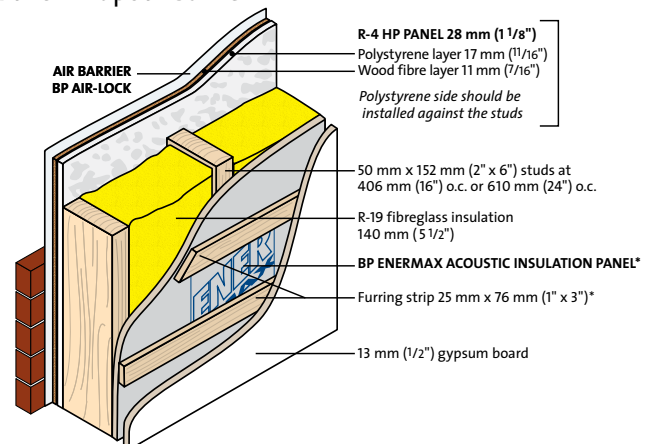
	RSI	R
<b>Total thermal resistance :</b>	<b>4.55</b>	<b>25.82</b>
Exterior air-film	0.03	0.17
Brick	0.07	0.40
Air gap 19 mm (3/4 in.)	0.18	1.02
<b>BP R-4 HP</b>	<b>0.71</b>	<b>4.03</b>
Batt insulation 140 mm (5 1/2 in.)	3.36	19.08
Gypsum 13 mm (1/2 in.)	0.08	0.44
Interior air-film	0.12	0.68



# Discover the benefits of a high performance assembly... that's BP Quality!

Lock out air infiltration and bad weather from exterior walls with BP Air-Lock then insulate with BP R-4 HP. On the interior side, take advantage of Enermax's soundproofing benefits.

- R-30\* (RSI 5.28) unsurpassed insulation
- Excellent soundproofing
- Built-in vapour barrier



\* Thermal bridges should be covered with R-4 HP. Enermax should be installed with furring strips (19 mm [3/4 in.] air gap) in compliance with CCMC 13494-R Evaluation Report to obtain the reflectivity value of the aluminum film.

# See the benefits of using wood fibre-based products



Properties	Wood Fibre Insulation	OSB / Plywood	Extruded Polystyrene	Expanded Polystyrene	Polyisocyanurate	
<b>R Value</b>	METRIC	Good <sup>(1)</sup> RSI 0.020/mm	Inferior RSI 0.011/mm	Very Good <sup>(1)</sup> RSI 0.035/mm	Very Good <sup>(1)</sup> RSI 0.028/mm	Superior <sup>(1)</sup> RSI 0.042/mm
	IMPERIAL	R3/inch	R1.3/inch	R5/inch	R4/inch	R6/inch
<b>Water Vapour Permeance</b>	METRIC	286 to 2002 ng/(Pa•s•m <sup>2</sup> )	45.8 ng/(Pa•s•m <sup>2</sup> )	36.6 ng/(Pa•s•m <sup>2</sup> )	200 ng/(Pa•s•m <sup>2</sup> )	57.2 ng/(Pa•s•m <sup>2</sup> )
	IMPERIAL	Superior 5 to 35 perms	Inferior 0.8 perms	Inferior 0.64 perms	Good 3.5 perms	Inferior 1 perms
<b>Structural Rigidity</b>	Good <sup>(2)</sup>	Best <sup>(2)</sup>	Inferior	Inferior	Inferior	
<b>Acoustic Performance<sup>(3)</sup></b>	Superior	Average	Inferior	Inferior	Inferior	
<b>Price Volatility</b>	Low Stable	High Unstable	High Stable	Average Stable	Very High Stable	
<b>Environmental Properties</b>	Natural	Formaldehyde	HCFC/Pentane	HCFC	Pentane	

<sup>(1)</sup> National Building Code: 9.25.2.2.

<sup>(2)</sup> National Building Code: 9.23.10.2.

<sup>(3)</sup> According to ASTM-E413 standard

## Benefits at a glance



THERMAL INSULATION



HIGH VAPOUR PERMEANCE



STRUCTURAL INSULATION



SOUND DEADENING



COST EFFECTIVE



RECYCLED/ RECYCLABLE

# Build with BP's high quality and high-performance products!

A full range of products for the building envelope

## ENERMAX Acoustic Insulation Panel

Enermax combines both sound attenuation and thermal insulating properties. The reflective aluminum side improves the soundproofing efficiency of any wall or floor/ceiling assembly and can be also used as an air barrier. With its built-in vapour retarder, Enermax increases the building's energy efficiency. It is the perfect wall solution for a healthier, more comfortable and more peaceful indoor environment.



## EXCEL High-Performance Sheathing

Excel is used in high-performance exterior wall construction. With its built-in membrane, it is a structural and insulating panel that also serves as an air barrier. Excel provides transverse force and breaking strength and its air infiltration rating is superior to most sheathing systems currently in use.



## HIGH-PERFORMANCE and Regular Sheathings

An economical panel used on the exterior of frame construction. Its excellent permeability, racking strength and weather resistance provide a perfect base for the exterior wall finish.



## AIR-LOCK and AIR-GARD Intermediate Sheathings

BP's intermediate sheathings offer an exceptional tear resistance that protects wall cavities from water infiltration. They also allow water vapour inside to escape so the walls remain dry and well performing. Their low air permeability adds to a greater energy efficiency.



With more than 100 years of experience, BP is one of North America's largest and most reputable manufacturers of natural wood fibre boards. BP has sold more than 15 billion square feet of wood fibre products and is a major supplier of residential, commercial and industrial structural insulating sheathing, roofing, ceiling tiles and panels, and specialty industrial products. BP is recognized as an industry innovator with a rich history of solid values.



MADE HERE  
PREFERRED EVERYWHERE



BUILDING PRODUCTS OF CANADA CORP.

420 Dupont St., Pont-Rouge, Québec, Canada G3H 1S2  
9510 St. Patrick St., LaSalle, Québec, Canada H8R 1R9

[www.bpcan.com](http://www.bpcan.com)