

RIGID FRAME
STEEL BUILDINGS

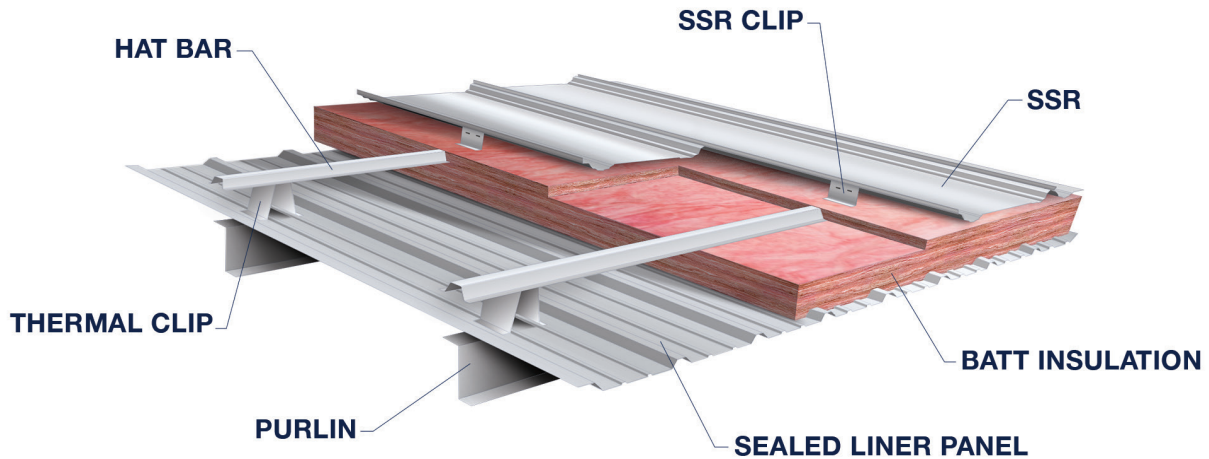


ENERGY EFFICIENCY - INSULATION SYSTEMS

INDUSTRIAL | COMMERCIAL | RECREATIONAL | INSTITUTIONAL

BEHLEN
STEEL BUILDINGS

THERMAL GUARD ROOF - THERMAL SYSTEM WITH LINER



FEATURES

- Flexibility to meet energy codes
- Steel Liner panel that acts as integral vapour barrier
- Steel liner available in Galvalume or range of colours to provide attractive clean finish to the roof
- Steel liner provides strong protection to insulation system
- Cost effective to install and maintain
- Installs above secondary so easy to install
- Well-suited for installation with cold-formed purlins, steel joists or other framing

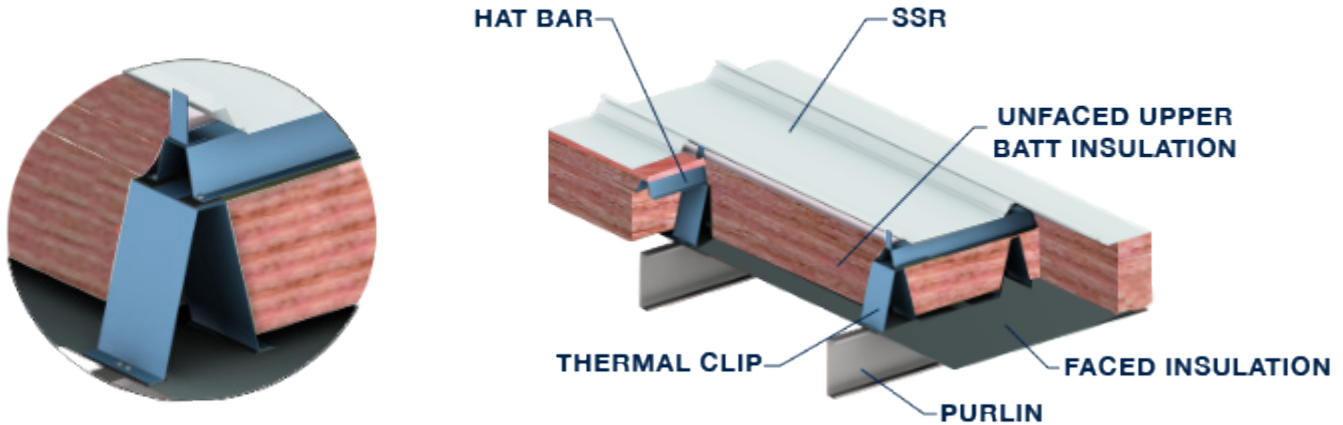
BENEFITS

- High thermal performance for heat and cold for compliance with applicable energy codes
- Clean overhead appearance
- Ease of installation and durability saves on initial construction and long-term maintenance
- Long-term weather protection backed by warranties

Thermal Cavity	Batt Insulation	Effective U-Value	Effective R-Value
10"	R28 + R10	0.037	26.9
10"	R28 + R20	0.031	32.0
12"	R30 + R10	0.035	28.5
12"	R30 + R20	0.029	34.2
14"	R28 + R13 + R10	0.029	34.3
14"	R28 + R13 + R20	0.025	39.4

* 1" thermal block R=5.0 between clips, MBI R=3.33/in

THERMAL SYSTEM ECONOMY - THERMAL SYSTEM WITHOUT LINER



FEATURES

- Flexibility to meet energy codes
- Cost effective to install and maintain
- Installs above secondary and insulation does not extend into purlin cavity
- Well-suited for installation with cold-formed purlins, steel joists or other framing

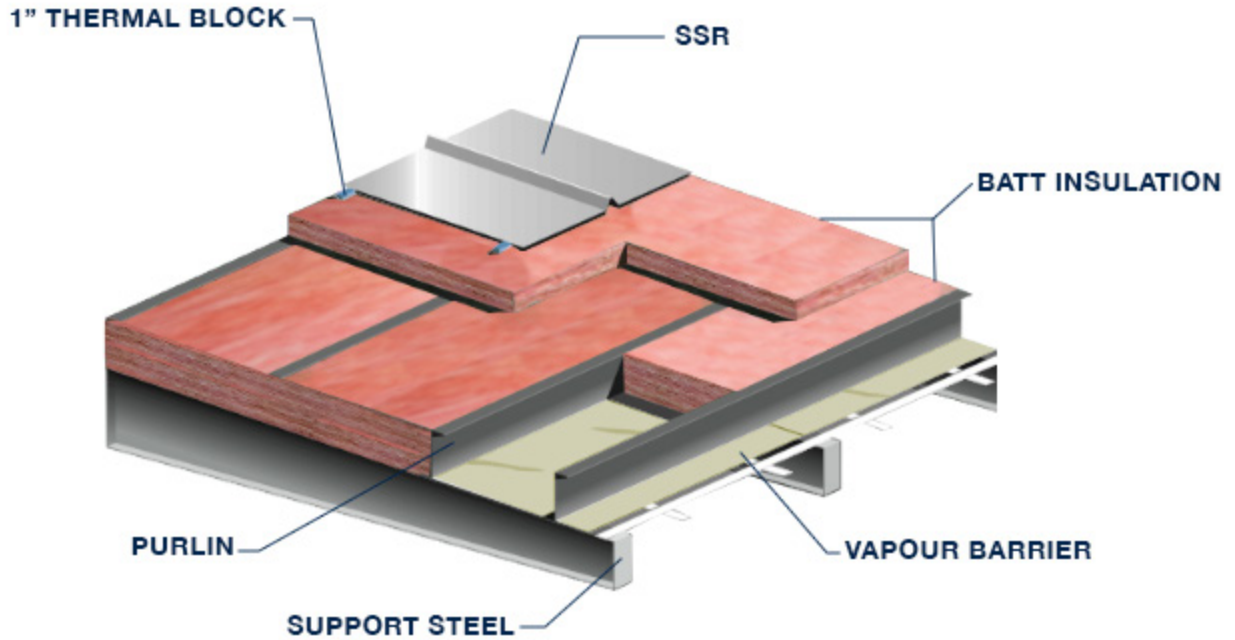
BENEFITS

- High thermal performance for heat and cold for compliance with applicable energy codes
- Clean overhead appearance
- Ease of installation saves on initial construction and long-term maintenance
- Long-term weather protection backed by warranties

Thermal Cavity	Batt Insulation	Effective U-Value	Effective R-Value
10"	R28 + R10	0.037	27.1
10"	R28 + R20	0.031	32.2
12"	R30 + R10	0.035	28.5
12"	R30 + R20	0.029	34.1
14"	R28 + R13 + R10	0.029	34.3
14"	R28 + R13 + R20	0.025	39.7

* 1" thermal block R=5.0 between clips, MBI R=3.33/in

CAVITY FILL INSULATION SYSTEM: LINER OR VAPOUR BARRIER UNDER PURLINS



FEATURES

- Flexibility to meet energy codes
- Cost effective to install and maintain
- Insulations fills purlin cavity taking advantage of wasted space
- Well-suited for installation with cold-formed purlins
- Clean finish on underside of the roof members

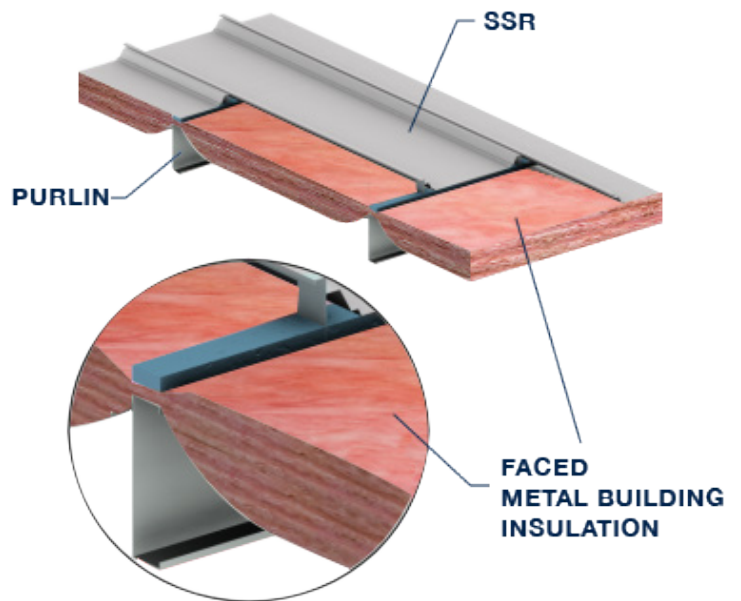
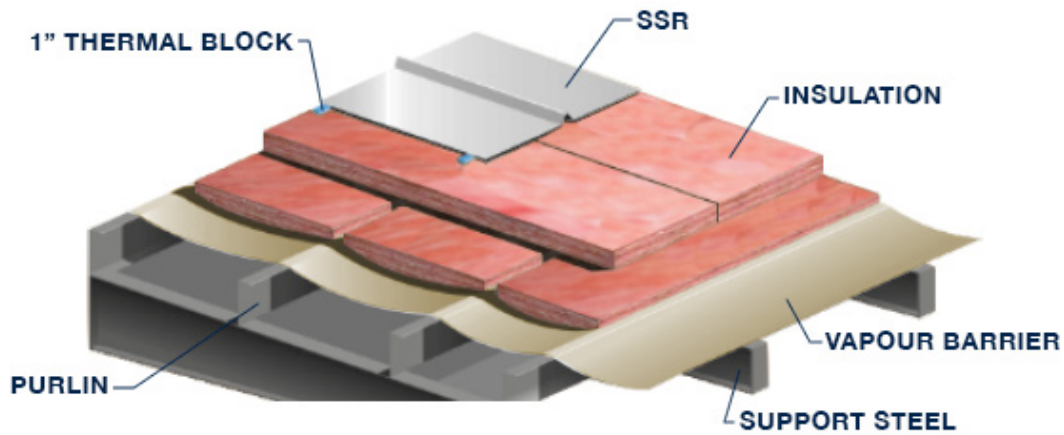
BENEFITS

- High thermal performance for heat and cold for compliance with applicable energy codes
- Durability of the roof finish
- Long-term weather protection backed by warranties

Thermal Cavity	Batt Insulation	Effective U-Value	Effective R-Value
8"	R28 + R10	0.036	27.8
8"	R28 + R20	0.027	37.0
10"	R30 + R10	0.034	29.5
10"	R30 + R20	0.026	38.7
12"	R28 + R13 + R10	0.030	33.5
12"	R28 + R13 + R20	0.023	43.0

* 1" thermal block R=5.0 between clips, MBI R=3.33/in

DRAPED INSULATION SYSTEM



FEATURES

- Cost effective to install
- Can use multiple layers to achieve desired insulation
- Well-suited for installation with cold-formed purlins

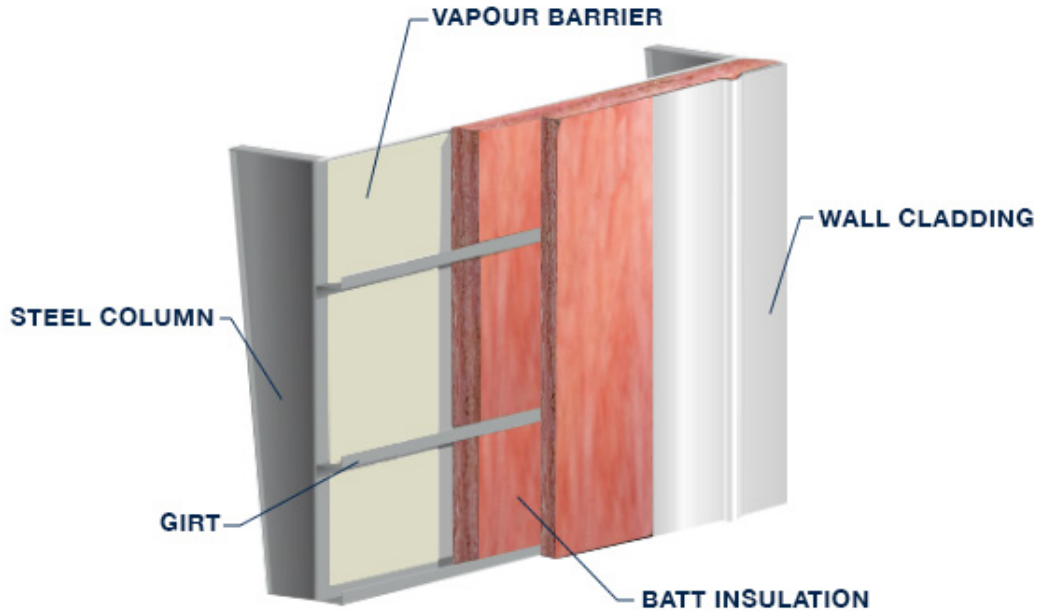
BENEFITS

- Simple to install
- Clean overhead appearance
- Long-term weather protection backed by warranties

Description	Batt Insulation	Effective U-Value	Effective R-Value
Single batt + Block	R19	0.065	15.4
Double layer + Block between clips	R20 + R12	0.0465	21.8
Double layer + Block under clip	R20 + R20	0.031	31.5
Double layer + Block under clip	R28 + R20	0.028	36.2

* 1" thermal block R=5.0 between clips, MBI R=3.33/in

CAVITY FILL WALL INSULATION SYSTEM: LINER OR VAPOUR BARRIER INSIDE GIRT FACE



FEATURES

- Flexibility to meet energy codes
- Cost effective to install and maintain
- Insulations fills girt cavity taking advantage of wasted space
- Well-suited for installation with cold-formed purlins
- Clean finish on inside wall face

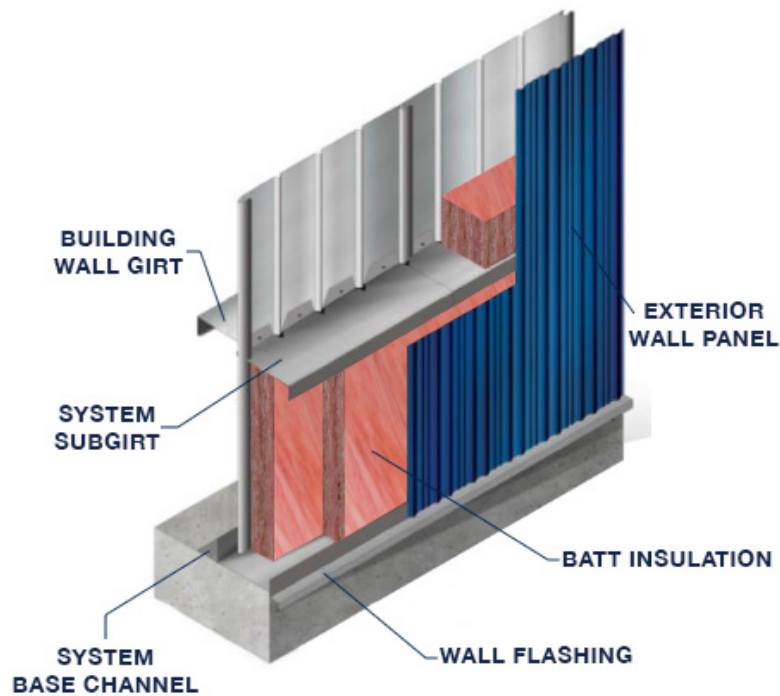
BENEFITS

- High thermal performance for heat and cold for compliance with applicable energy codes
- Durability of the wall finish
- Long-term weather protection backed by warranties

Girt Spacing	Thermal Cavity	Batt Insulation	Effective U-Value	Effective R-Value
4 ft.	8"	R28 infill only	0.052	19.3
	8"	R28 infill + R13 pinch	0.040	25.2
	8"	R30 infill + R20 pinch	0.035	28.7
	10"	R30 infill only	0.048	20.9
	10"	R30 infill + R13 pinch	0.037	26.7
	10"	R30 infill + R20 pinch	0.033	30.3
R 5.0 1" block	Adjustment		U = 1/R	Add +1.4

* With 1" thermal BlockR=5.0, MBI R=3.33/in

VAPOURGUARD WALL - THERMAL SYSTEM WITH LINER



FEATURES

- Flexibility to meet energy codes
- Steel Liner panel that acts as integral vapour barrier
- Steel liner available Galvalume or range of colours to provide attractive clean finish to the wall
- Steel liner provides strong protection to insulation system
- Cost effective to install and maintain
- Installs above secondary so easy to install
- Well-suited for installation with cold-formed, steel channels or other framing

BENEFITS

- High thermal performance for heat and cold for compliance with applicable energy codes
- Clean wall appearance
- Ease of installation and durability saves on initial construction and long-term maintenance
- Long-term weather protection backed by warranties

Thermal Cavity	Batt Insulation	Effective U-Value	Effective R-Value
6"	R25	0.044	22.5
7"	R29	0.039	25.7
8"	R34	0.035	28.4
4" Thermal Clip + 2" hat	R25	0.040	24.8

* MBI R=4.2/in



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