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THERMAL INSULATION VALUE of INTEGRASPEC ICF WALL COMPONENTS

Table R-4 (4 in (10.16 cm)) Concrete Core)

Wall Material Insulating Properties	Thickness in. (mm)	Thermal Resistance F-hr-ft^2/BTU – in	R-value F-hr-ft^2/BTU (RSI)
Exterior Wall Finishing	Not incl.	Not incl.	Not incl.
Air Barrier / Film	N/A	N/A	N/A
IntegraSpec Panel (Type 2 EPS – 1.50 lbs/cu/ft)	2.5 (63.5)	4.2	10.5 (1.85)
Concrete-insulated*	4.0 (102)	1.2	4.8 (0.85)
IntegraSpec Panel (Type 2 EPS – 1.50 lbs/cu/ft)	2.5 (63.5)	4.2	10.5 (1.85)
Vapour Barrier / Film	N/A	N/A	N/A
Interior Wall Finishing Gypsum Board/Drywall	0.5 (12.7)	0.9	0.45 (0.08)
	Thermal Insulation Total **[U Value = 1/R X 5.682]**		**26.25 (4.63) [0.216 W/m^{2}k]**

Note: Above table shows the R-value (U-value) for the various thermal insulation materials forming part of the IntegraSpec ICF wall system (does not include exterior wall finish). IntegraSpec® EPS panels as tested by Intertek - Warnock Hershey (Test Report No. 3044735) in accordance to ASTM C578-01, CAN/ULC S-701-01 (test results shown below):

IntegraSpec® Panels = Type 2, Expanded Polystyrene (EPS):

A- Density (ASTM C 303-98) = 1.50 Lbs/ft^3 (24.14 kg/m^3)
B- Compressive (ASTM C 165-00) = 20 psi (138 kPa) @ 10% deformation
C- Flexural Strength (ASTM C203-99) = 38.60 psi (291 kPa)

Water Vapour Permeance

Test Results IntegraSpec's 2.5 in (63.5mm) EPS panel(s): (ASTM E 96-00e) = 0.69 perms (39.8 ng/Pa.s.m^2) - *Body Cote Test Report No. 04-06-M0242.*

Air Leakage

IntegraSpec®'s Type 2 EPS panel(s) nominal air leakage characteristic = (0.0214 L/(s.m^2) at 75 Pa per 25 mm (excluding concrete core and finishes).

*Above values includes published third party industry data.

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THERMAL INSULATION VALUE of INTEGRASPEC ICF WALL COMPONENTS

Table R-5 (5 in (12.7 cm)) Concrete Core)

Wall Material Insulating Properties	Thickness in. (mm)	Thermal Resistance F-hr-ft^2/BTU – in	R-value F-hr-ft^2/BTU (RSI)
Exterior Wall Finishing	Not incl.	Not incl.	Not incl.
Air Barrier / Film	N/A	N/A	N/A
IntegraSpec Panel (Type 2 EPS – 1.50 lbs/cu/ft)	2.5 (63.5)	4.2	10.5 (1.85)
Concrete-insulated*	5.0 (127)	1.2	6.0 (1.06)
IntegraSpec Panel (Type 2 EPS – 1.50 lbs/cu/ft)	2.5 (63.5)	4.2	10.5 (1.85)
Vapour Barrier / Film	N/A	N/A	N/A
Interior Wall Finishing Gypsum Board/Drywall	0.5 (12.7)	0.9	0.45 (0.08)
	Thermal Insulation Total **[U Value = 1/R X 5.682]**		**27.45 (4.84) [0.207 W/m^{2}k]**

Note: Above table shows the R-value (U-value) for the various thermal insulation materials forming part of the IntegraSpec ICF wall system (does not include exterior wall finish). IntegraSpec® EPS panels as tested by Intertek - Warnock Hershey (Test Report No. 3044735) in accordance to ASTM C578-01, CAN/ULC S-701-01 (test results shown below):

IntegraSpec® Panels = Type 2, Expanded Polystyrene (EPS):

A- Density (ASTM C 303-98) = 1.50 Lbs/ft^3 (24.14 kg/m^3)
B- Compressive (ASTM C 165-00) = 20 psi (138 kPa) @ 10% deformation
C- Flexural Strength (ASTM C203-99) = 38.60 psi (291 kPa)

Water Vapour Permeance

Test Results IntegraSpec's 2.5 in (63.5mm) EPS panel(s): (ASTM E 96-00e) = 0.69 perms (39.8 ng/Pa.s.m^2) - *Body Cote Test Report No. 04-06-M0242.*

Air Leakage

IntegraSpec®'s Type 2 EPS panel(s) nominal air leakage characteristic = (0.0214 L/(s.m^2) at 75 Pa per 25 mm (excluding concrete core and finishes).

*Above values includes published third party industry data.

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THERMAL INSULATION VALUE of INTEGRASPEC ICF WALL COMPONENTS

Table R-6 (6 in (15.2 cm)) Concrete Core)

Wall Material Insulating Properties	Thickness in. (mm)	Thermal Resistance F-hr-ft^2/BTU – in	R-value F-hr-ft^2/BTU (RSI)
Exterior Wall Finishing	Not incl.	Not incl.	Not incl.
Air Barrier / Film	N/A	N/A	N/A
IntegraSpec Panel (Type 2 EPS – 1.50 lbs/cu/ft)	2.5 (63.5)	4.2	10.5 (1.85)
Concrete-insulated*	6.0 (152.4)	1.2	7.2 (1.27)
IntegraSpec Panel (Type 2 EPS – 1.50 lbs/cu/ft)	2.5 (63.5)	4.2	10.5 (1.85)
Vapour Barrier / Film	N/A	N/A	N/A
Interior Wall Finishing Gypsum Board/Drywall	0.5 (12.7)	0.9	0.45 (0.08)
	Thermal Insulation Total **[U Value = 1/R X 5.682]**		**28.65 (5.05) [0.198 W/m^{2}k]**

Note: Above table shows the R-value (U-value) for the various thermal insulation materials forming part of the IntegraSpec ICF wall system (does not include exterior wall finish). IntegraSpec® EPS panels as tested by Intertek - Warnock Hershey (Test Report No. 3044735) in accordance to ASTM C578-01, CAN/ULC S-701-01 (test results shown below):

IntegraSpec® Panels = Type 2, Expanded Polystyrene (EPS):

A- Density (ASTM C 303-98) = 1.50 Lbs/ft^3 (24.14 kg/m^3)
B- Compressive (ASTM C 165-00) = 20 psi (138 kPa) @ 10% deformation
C- Flexural Strength (ASTM C203-99) = 38.60 psi (291 kPa)

Water Vapour Permeance

Test Results IntegraSpec's 2.5 in (63.5mm) EPS panel(s): (ASTM E 96-00e) = 0.69 perms (39.8 ng/Pa.s.m^2) - *Body Cote Test Report No. 04-06-M0242.*

Air Leakage

IntegraSpec®'s Type 2 EPS panel(s) nominal air leakage characteristic = (0.0214 L/(s.m^2) at 75 Pa per 25 mm (excluding concrete core and finishes).

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THERMAL INSULATION VALUE of INTEGRASPEC ICF WALL COMPONENTS

Table R-8 (8 in (20.3 cm)) Concrete Core)

Wall Material Insulating Properties	Thickness in. (mm)	Thermal Resistance F-hr-ft^2/BTU – in	R-value F-hr-ft^2/BTU (RSI)
Exterior Wall Finishing	Not incl.	Not incl.	Not incl.
Air Barrier / Film	N/A	N/A	N/A
IntegraSpec Panel (Type 2 EPS – 1.50 lbs/cu/ft)	2.5 (63.5)	4.2	10.5 (1.85)
Concrete-insulated*	8.0 (203)	1.2	9.8 (1.73)
IntegraSpec Panel (Type 2 EPS – 1.50 lbs/cu/ft)	2.5 (63.5)	4.2	10.5 (1.85)
Vapour Barrier / Film	N/A	N/A	N/A
Interior Wall Finishing Gypsum Board/Drywall	0.5 (12.7)	0.9	0.45 (0.08)
	Thermal Insulation Total **[U Value = 1/R X 5.682]**		**31.25 (5.51) [0.181 W/m^{2}k]**

Note: Above table shows the R-value (U-value) for the various thermal insulation materials forming part of the IntegraSpec ICF wall system (does not include exterior wall finish). IntegraSpec® EPS panels as tested by Intertek - Warnock Hershey (Test Report No. 3044735) in accordance to ASTM C578-01, CAN/ULC S-701-01 (test results shown below):

IntegraSpec® Panels = Type 2, Expanded Polystyrene (EPS):

A- Density (ASTM C 303-98) = 1.50 Lbs/ft^3 (24.14 kg/m^3)
B- Compressive (ASTM C 165-00) = 20 psi (138 kPa) @ 10% deformation
C- Flexural Strength (ASTM C203-99) = 38.60 psi (291 kPa)

Water Vapour Permeance

Test Results IntegraSpec's 2.5 in (63.5mm) EPS panel(s): (ASTM E 96-00e) = 0.69 perms (39.8 ng/Pa.s.m^2) - *Body Cote Test Report No. 04-06-M0242.*

Air Leakage

IntegraSpec®'s Type 2 EPS panel(s) nominal air leakage characteristic = (0.0214 L/(s.m^2) at 75 Pa per 25 mm (excluding concrete core and finishes).

*Above values includes published third party industry data.

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THERMAL INSULATION VALUE of INTEGRASPEC ICF WALL COMPONENTS

Table R-10 (10 in (25.4 cm)) Concrete Core)

Wall Material Insulating Properties	Thickness in. (mm)	Thermal Resistance F-hr-ft^2/BTU – in	R-value F-hr-ft^2/BTU (RSI)
Exterior Wall Finishing	Not incl.	Not incl.	Not incl.
Air Barrier / Film	N/A	N/A	N/A
IntegraSpec Panel (Type 2 EPS – 1.50 lbs/cu/ft)	2.5 (63.5)	4.2	10.5 (1.85)
Concrete-insulated*	10.0 (254)	1.2	12.0 (2.11)
IntegraSpec Panel (Type 2 EPS – 1.50 lbs/cu/ft)	2.5 (63.5)	4.2	10.5 (1.85)
Vapour Barrier / Film	N/A	N/A	N/A
Interior Wall Finishing Gypsum Board/Drywall	0.5 (12.7)	0.9	0.45 (0.08)
	Thermal Insulation Total **[U Value = 1/R X 5.682]**		**33.45 (5.89) [0.169 W/m^{2}k]**

Note: Above table shows the R-value (U-value) for the various thermal insulation materials forming part of the IntegraSpec ICF wall system (does not include exterior wall finish). IntegraSpec® EPS panels as tested by Intertek - Warnock Hershey (Test Report No. 3044735) in accordance to ASTM C578-01, CAN/ULC S-701-01 (test results shown below):

IntegraSpec® Panels = Type 2, Expanded Polystyrene (EPS):

A- Density (ASTM C 303-98) = 1.50 Lbs/ft^3 (24.14 kg/m^3)
B- Compressive (ASTM C 165-00) = 20 psi (138 kPa) @ 10% deformation
C- Flexural Strength (ASTM C203-99) = 38.60 psi (291 kPa)

Water Vapour Permeance

Test Results IntegraSpec's 2.5 in (63.5mm) EPS panel(s): (ASTM E 96-00e) = 0.69 perms (39.8 ng/Pa.s.m^2) - *Body Cote Test Report No. 04-06-M0242.*

Air Leakage

IntegraSpec®'s Type 2 EPS panel(s) nominal air leakage characteristic = (0.0214 L/(s.m^2) at 75 Pa per 25 mm (excluding concrete core and finishes).

*Above values includes published third party industry data.

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THERMAL INSULATION VALUE of INTEGRASPEC ICF WALL COMPONENTS

Table R-12 (12 in (30.48 cm)) Concrete Core)

Wall Material Insulating Properties	Thickness in. (mm)	Thermal Resistance F-hr-ft^2/BTU – in	R-value F-hr-ft^2/BTU (RSI)
Exterior Wall Finishing	Not incl.	Not incl.	Not incl.
Air Barrier / Film	N/A	N/A	N/A
IntegraSpec Panel (Type 2 EPS – 1.50 lbs/cu/ft)	2.5 (63.5)	4.2	10.5 (1.85)
Concrete-insulated*	12.0 (305)	1.2	14.4 (2.54)
IntegraSpec Panel (Type 2 EPS – 1.50 lbs/cu/ft)	2.5 (63.5)	4.2	10.5 (1.85)
Vapour Barrier / Film	N/A	N/A	N/A
Interior Wall Finishing Gypsum Board/Drywall	0.5 (12.7)	0.9	0.45 (0.08)
	Thermal Insulation Total **[U Value = 1/R X 5.682]**		**35.85 (6.32) [0.158 W/m^{2}k]**

Note: Above table shows the R-value (U-value) for the various thermal insulation materials forming part of the IntegraSpec ICF wall system (does not include exterior wall finish). IntegraSpec® EPS panels as tested by Intertek - Warnock Hershey (Test Report No. 3044735) in accordance to ASTM C578-01, CAN/ULC S-701-01 (test results shown below):

IntegraSpec® Panels = Type 2, Expanded Polystyrene (EPS):

A- Density (ASTM C 303-98) = 1.50 Lbs/ft^3 (24.14 kg/m^3)
B- Compressive (ASTM C 165-00) = 20 psi (138 kPa) @ 10% deformation
C- Flexural Strength (ASTM C203-99) = 38.60 psi (291 kPa)

Water Vapour Permeance

Test Results IntegraSpec's 2.5 in (63.5mm) EPS panel(s): (ASTM E 96-00e) = 0.69 perms (39.8 ng/Pa.s.m^2) - *Body Cote Test Report No. 04-06-M0242.*

Air Leakage

IntegraSpec®'s Type 2 EPS panel(s) nominal air leakage characteristic = (0.0214 L/(s.m^2) at 75 Pa per 25 mm (excluding concrete core and finishes).

*Above values includes published third party industry data.