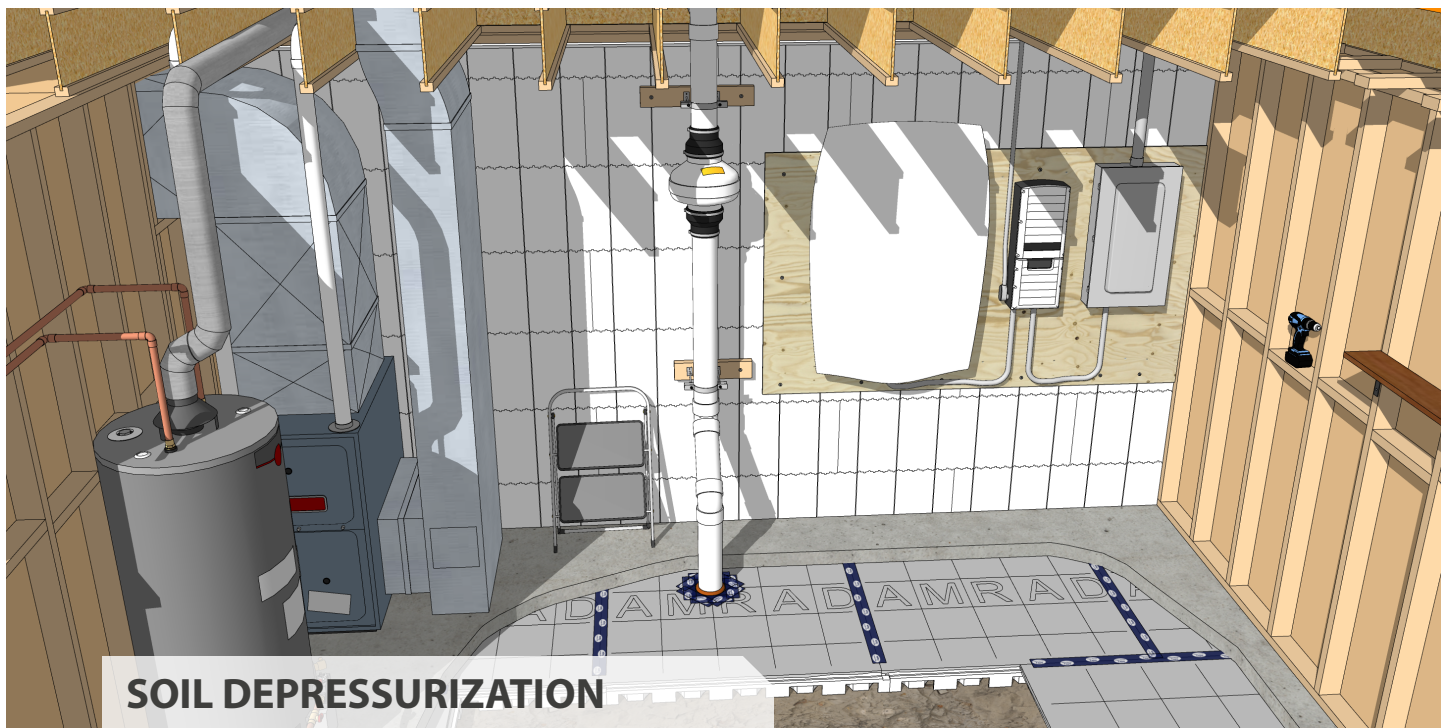
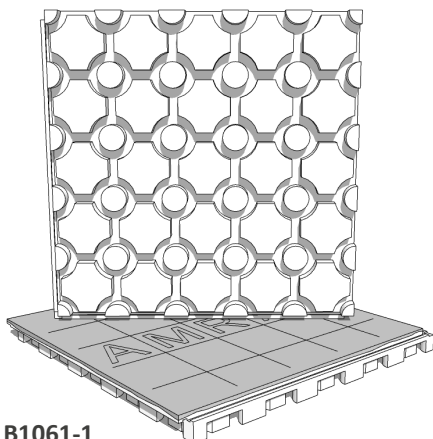


Amrad Insulated Radon Panels



SOIL DEPRESSURIZATION

Amrad is an insulated sub-slab ventilation panel and a part of a radon gas mitigation system. The panels are molded using high density, closed cell, Type 2 (Type II) Expanded Polystyrene (EPS) insulation with High Impact Polystyrene (HIPS) film. The panels are laid side by side to provide continuous venting, insulation and air/vapor barrier between the ground and the concrete slab. Amrad replaces the need for 4" (102mm) gravel and a dedicated soil gas retarding membrane.



QAI Listing B1061-1

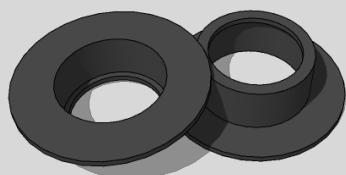
Alleguard Advantage

- Interconnected channels allow for continuous venting air to the exterior and provide capillary break reducing potential moisture related issues.
- Unique channel pattern design allows for strongest panel while maintaining the needed gas venting capabilities.
- Provides continuous insulation under the concrete slab for a comfortable and energy efficient building.
- Each panel is easy to handle due to the low weight and smaller size [4x4' (1.2x1.2m)].
- Increased thermal resistance in lower temperatures with exceptional Long-Term Thermal Resistance (LTTR).

Physical Properties Table

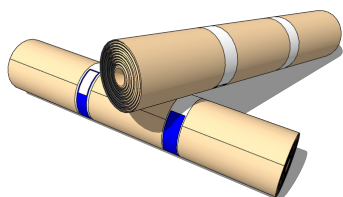
	Standard	AMRAD 3512F ^{1, 3}	AMRAD 4516F ^{2, 3}
Specification for Rigid Polystyrene Insulation	CAN/ULC-S701 ASTM C578	Type 2 Type II	Type 2 Type II
Thermal Resistance ¹	ASTM C518 @ 75°F (24°C)	12 F.ft ² .hr/Btu (2.11 m ² K/W)	16 F.ft ² .hr/Btu (2.82 m ² K/W)
Compressive Strength	ASTM D1621 @ 10% Strain	20 psi (138 kPa)	20 psi (138 kPa)
Water Absorption (Max.)	ASTM D2842	3.0%	3.0%
Water Vapor Permeance (Max.)	ASTM E96	0.1 US perm (5.4 ng/Pa.s.m ²)	0.1 US perm (5.4 ng/Pa.s.m ²)
Material Air Permeance (Max.)	ASTM E2178 @ 75 Pa	0.004 cfm/ft ² (0.02 L/m ² s)	0.004 cfm/ft ² (0.02 L/m ² s)
Flexural Strength	ASTM C203	35 psi (242 kPa)	35 psi (242 kPa)
Dimensional Stability (Max.)	ASTM D2126	1.5%	1.5%
Limiting Oxygen Index (Min.)	ASTM D2863	>24%	>24%
Density	ASTM D1622	1.5 lb/ft ³ (24 kg/m ³)	1.5 lb/ft ³ (24 kg/m ³)

¹ Panel thickness is 3.5" (89mm)
² Panel thickness is 4.5" (114mm)
³ Actual panel size is 49.25x49.25" (1251x1251mm)



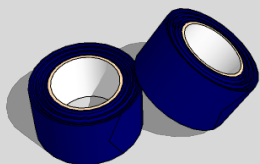
Amrad Adapter (available from Alleguard)

The Amrad Adapter is made from PVC and designed to be used with Amrad panels. It serves to connect the channels in the panels to a 4" (102mm) schedule 40 PVC pipe which is then connected to a continuously operating exhaust fan. The adapter is designed to be installed at the intersection of the indented lines on the panels to ensure best air flow. The adapter should be sealed to the panel by using a combination of tape and sealant or self adhering membrane.



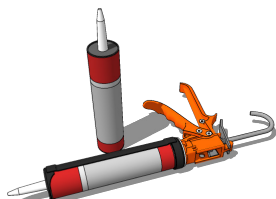
Self Adhering Membrane (available from Alleguard)

The self adhering membrane is an approved third party product that was tested along with Alleguard's Amrad panels and adapter and meets all the criteria for both air and vapor barrier performance over time. The membrane comes in 12" (305mm) pre-cut strips to be used along the perimeter of the foundation, to seal the adapter and substantial penetrations.



Vapor and Air Barrier Tape

The tape is an approved third party product that was tested along with Alleguard's Amrad panels and adapter and meets all the criteria for both air and vapor barrier performance over time. The tape is minimum 2.36" (60mm) wide and is to be used to seal the seams between panels, adapter, any smaller penetrations and along the perimeter in conjunction with vapor barrier membrane.



Sealant

The acoustic sealant is an approved third party product that was tested along with Amvic's Amrad panels and adapter and meets all the criteria for both air and vapor barrier performance. The acoustic sealant is to be used to seal any penetrating elements through the panels such as plumbing risers, the Amrad Adapter and along the perimeter in conjunction with a vapor barrier membrane and tape.