

Enkavent®

Radon & Moisture Control Matting

Under concrete
slab construction

Hydrostatic
pressure relief

Under basement
slab construction

Subslab grid

Crawlspace overlay

Subsurface walls



The most effective method of controlling radon

Enka-Engineered
BUILDING PRODUCTS

COLBOND



The Enkavent® System.

According to the EPA, the most effective way to reduce radon is to prevent the gas from entering the structure.

The Enkavent system does just that. In fact, in an EPA study conducted in Clinton, New Jersey, Enkavent matting helped reduce the level of radon by 97%.

Make your building Radon-Control-Ready.

When you install Enkavent, you're providing an airspace that intercepts radon before it seeps into the basement, crawl space or through the slab. If you or your buyer discover high concentrations of the gas after the structure is completed, pipes can be added to route the gas outdoors.

The construction of Enkavent: why it works.

Enkavent matting is a 0.8-inch high matrix of nylon filaments point-bonded to a polyester filter fabric. 95% of this geomatrix is airspace, which means radon has room to flow in every direction.

Enkavent is also stiff. It can stand up to concrete without compressing, but it's lightweight enough for easy handling.

How the Enkavent system works.

The Enkavent system allows the radon to flow through the filter fabric and into the airspace created by the nylon matrix. This airspace doesn't clog because the filter fabric restrains the underlying gravel and soil.

The natural airflow through the Enkavent matting then channels the radon to pipe openings. From there, the gas is routed outdoors as necessary. If high radon levels persist, inline fans can easily be installed to increase airflow.



Features & Benefits:

- High flow system reduces the level of radon up to 97%
- A moisture evacuation path
- 95% air space for much higher air flow than aggregate
- High compression strength, able to sustain the load of a 12" concrete slab
- Nylon filaments resist most soil chemicals and solvents
- Hinged crease for easy placement along foundation wall
- Lightweight and easy to handle—a 100' roll only weigh 27 lbs.

Proven Protection From Radon

How to install the Enkavent system.

At the very most, it only takes four man-hours to make a structure Radon-Control-Ready.



Ready: Unroll the Enkavent matting with fabric side down. Lay a continuous strip of Enkavent along the basement perimeter.



Set: Nail to the wall at the Enkavent hinge. Adhere expansion joint stripping above the Enkavent matting. Now lay one strip of Enkavent through the center, parallel to the longest wall. If center to center distance of strips exceed 15' additional strips will be needed. Overlay the subfloor with a vapor barrier extending up the wall to meet the expansion joint stripping.



Go: Cut a 3" hole in the vapor barrier 8" from the most appropriate corner. Glue a 4" flanged riser pipe with a detachable cap to the vapor barrier. Pour the slab. Later extend the vent pipe through the roof.

Notice: The top course of block basement wall must be solid or sealed (according to the EPA guidelines) for a basement mitigation system to be effective.

Cost-effective for controlling radon.

Enkavent is a money saver—installation is quick and efficient. There's no digging or extra gravel needed.

Common sense mitigation tips.

Take these additional measures to control radon:

1. Caulk all wall / floor joints
2. Caulk all slab cracks
3. Seal the surface of basement walls

A Quick Look At What Enkavent Gives You

- A Radon-Control-Ready structure
- Added benefit of a moisture evacuation path
- Also vents hydrocarbon gases from your soil
- Cost-effective
- Easy to install
- Adaptable to sump system
- Meets all requirements of floating slab construction
- Proven results since 1985

Technical Data

Physical Properties	USA	(Metric)	Enkavent 6128	
Core Material			Nylon	
Thickness	inches	(mm)	0.8	(20.4)
Total Weight	oz/yd ²	(g/m ²)	24.8	(841.0)
Core Weight	oz/yd ²	(g/m ²)	21.3	(743.0)
Colbond Compressive Load Test ¹	psf	(kN/m ²)	>30,000 No failure*	

Standard Packaging Information

Product	USA	(Metric)	6128-101-000	
Core Width	inches	(cm)	18.0	(45.7)
Length	feet	(meters)	100.0	(30.5)
Area	yd ²	(m ²)	16.7	(14.0)
Roll Diameter	inches	(cm)	25.0	(63.5)
Gross Roll Weight	lbs	(kg)	27.0	(12.2)

Geotextile Fabric Properties

	Test Method	USA	(Metric)	Enkavent 6128	
Polymer				PET	
Weight	ASTM D 3776	oz/yd ²	(g/m ²)	3.5	(118)
Grab Strength	ASTM D 4632	lbs	(N)	90.0	(400)
Trapezoidal Tear	ASTM D 4533	lbs	(N)	35.0	(156)
Puncture Resistance	ASTM D 4833	lbs	(N)	45.0	(200)
Mullen Burst	ASTM D 3786	psi	(Kpa)	170.0	(1170)
AOS (maximum average)	ASTM D 4751		(mm)	120.0	(0.10)
Flow Rate	ASTM D 4491	gpm/ft ²	(l/sec/m ²)	170.0	(6921)
Permittivity	ASTM D 4491	sec ⁻¹	(sec ⁻¹)	2.3	(2.31)
Air Permeability	cfm@0.5 in H ² O			400.0	
Temperature Range		°F	(°C)	-100 to 250 (-75 to 121)	
pH Range				3 to 12	
Fabric Color				White	

Design and Installation Assistance

This brochure is intended as a general information piece. For technical help, specific information, or the name of your nearest manufacturer's representative, please contact Colbond Inc.



1301 Sand Hill Road
P.O. Box 1057
Enka, N.C. 28728
Tel. (+1) 828-665-5050
Toll Free: (+1) 800-365-7391
Fax (+1) 828-665-5009

email:
enka-engineered@colbond.com

Internet:
www.colbond-usa.com

Colbond Inc.

is a global producer of high-quality synthetic nonwovens for flooring, automotive, and construction applications and three-dimensional polymeric mats and composites for civil engineering, building, and industrial applications.

DISCLAIMER

IN NO EVENT SHALL COLBOND INC. BE LIABLE FOR CONSEQUENTIAL DAMAGES OR DAMAGES OF ANY KIND EXCEEDING THE SALE PRICE OF OUR PRODUCTS FOUND TO HAVE BEEN DEFECTIVE. COLBOND MAKES NO WARRANTIES, EXPRESS OR IMPLIED BY OPERATION OF LAW OR OTHERWISE INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSES OR END USE. INFORMATION CONTAINED HEREIN REGARDING APPLICATIONS OF OUR PRODUCTS IS OF A GENERAL NATURE, AND SINCE CONDITIONS VARY WITH EACH SITE, COLBOND MAKES NO GUARANTEE OF RESULTS OR THE SUFFICIENCY OF THE INFORMATION CONTAINED HEREIN FOR THE USE CONTEMPLATED. Enkavent is a registered trademark of Colbond bv and is covered by a number of U.S. patents. No license is granted or implied by these materials.