



Installation & Sampling RadonAway RVI Test Port



Installation & Sampling Radonaway RVI Test Port *Please Read and Save These Instructions.*

The RadonAway Radon and Vapor Intrusion (RVI) Test Port is designed to be a low-cost, quick and easy way to conduct sub-slab differential pressure measurements and soil gas sampling beneath a concrete slab. The system consists of three components; a Port, Port Cap and a Port Installation/Cap Removal Tool which can be installed as a temporary or permanent sample point. This product is made from durable polyethylene plastic and has been designed to stand up to typical building traffic. *Note: Check RVI Test Port's chemical compatibility with the known or suspected chemical(s) present at your project site (refer to Page 4 for a partial Chemical Resistance Chart).*

This instruction describes the installation and usage of the RVI Test Port system for use in pressure field extension testing and soil gas sampling.

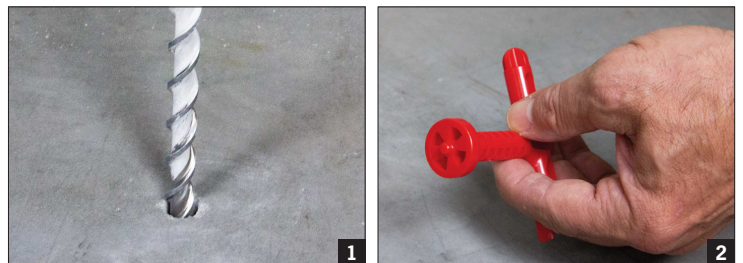
EQUIPMENT REQUIRED

- RVI Test Port
- RVI Cap
- RVI Installation/Cap Removal Tool
- Rotary Hammer Drill
- ½" Diameter Hammer Bit
- Wet/Dry Vacuum with HEPA Filter (recommended)
- ¼" Screwdriver (if closing out the port location)
- Lightweight Hammer (if closing out the port location – See Port Hole Closure Section)
- Hole patching material (hydraulic cement or RadonAway Pro Sealant, a putty knife or trowel) for repairing the hole as necessary.



INSTALLATION PROCEDURE

1. Check for buried obstacles (pipes, electrical lines, etc.) prior to drilling hole in concrete floor.
2. Set up wet/dry vacuum to collect drill debris and dust. Drill a ½" (13mm) diameter hole completely through the concrete slab into the sub base material. The hole must be ½" (13mm) in diameter to ensure a seal around the RVI Test Port (*Photo 1*).
3. Remove the drill bit, and remove the loose debris and dust from the hole and surrounding concrete surface using the vacuum.
4. Place the lower (thin) end of the Port into the drilled hole. Using the side of the Port Installation/Cap Removal Tool (Tool) that has the flat surface with the protruding pin (*Photo 2*) into the top (large) end of the Port so that the tool's flat surface is flush with the top edge of the Port (*Photo 3*).





5. Push the tool to the floor until the tool and Port is flush with floor (*Photo 4*). Make sure the Tool is aligned parallel to the Port to avoid damaging the port. If port cannot be pushed flush to the floor by hand, use a hammer to tap the top flat part of tool.
6. Place the RVI Cap (Cap) on the Port while not being used for sub-slab differential pressure measurements or soil gas sampling (*Photo 5*).



CAP REMOVAL / RE-INSTALLATION PROCEDURE

1. Using the “+” side of the Tool (*Photo 6*), insert the “+” end into the Cap and twist from side to side several times to make sure that the Cap is loose for subsequent removal (*Photo 7*).



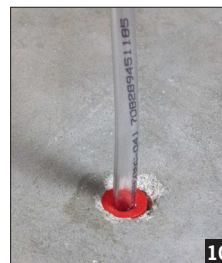
2. Using the “wedge” side of the Tool (*Photo 8*), slide the wedge between the Cap and the concrete floor and slowly pry moving the Tool around the Cap lip to several locations until the Cap is completely free of the Port (*Photo 9*).



3. Prior to re-installing, make sure Cap is free of dirt and debris in order to ensure that the Cap does not become bound to the Port.

TESTING / SAMPLING PROCEDURE

1. Remove the Cap using the Tool and push a ¼" outside diameter (O.D.) flexible tubing into the open hole at the top of the Port (*Photo 10*). The tubing should go into the Port approximately ½" or until snug to ensure a proper seal.
2. Connect tubing to appropriate testing or sampling devices to be used.
3. Upon completion of test/sampling, disconnect tubing from the Port and re-install Cap (*Photo 11*).





PORT HOLE ABANDONMENT AND CLOSURE

If the port has been installed as a temporary testing location, the port may be abandoned by pushing the port further into the drill hole a minimum of 2" using a 3/16" flathead screwdriver and hammer.

To complete abandonment – fill the 1/2" drill hole with a hole patching material (e.g., hydraulic cement or RadonAway Pro Sealant until flush with the surrounding surface elevation.) Use a putty knife or trowel to smooth the surface.

POLYETHYLENE CHEMICAL COMPATIBILITY CHART (PARTIAL LIST)

CHEMICAL	POLYETHYLENE RESISTANCE*
DIESEL	C
ETHYLENE GLYCOL	A
FUEL OIL (1, 2, 3, 5A, 5B, 6)	B
GASOLINE	A
HYDRAULIC OIL (PETRO)	C
HYDRAULIC OIL (SYNTHETIC)	A
JET FUEL (JP3, JP4, JP5)	D
LUBRICATING OIL	A
KEROSENE	C
MOTOR OIL	C
NAPHTHALENE	C
PETROLEUM	C
TRANSFORMER OIL	C
BENZENE	C
DICHLOROETHANE	C
ETHANOL	B
KETONES	C
METHANOL	A
MEK	D
METHYLENE CHLORIDE	D
MINERAL SPIRITS	B
PERCHLORETHYLENE	D
PAFFAFIN	B
XYLENE	B
AROMATIC HYDROCARBONS	C
TOLUENE	C

A – No Effect – Excellent

B – Minor Effect – Good

C – Moderate Effect – Fair

D – Sever Effect – Not Recommended

*Ratings of chemical behavior listed in this chart apply at a 48-hr exposure period. These recommendations are based upon information from material suppliers and careful examination of available published information and are believed to be accurate. However, since the resistance of plastics can be affected by concentration, temperature, presence of other chemicals and other factors. This information should be considered as a general guide rather than an unqualified guarantee. Ultimately, the customer must determine the suitability of the product material of construction used in various solutions.