

# STEGO™ WRAP VAPOUR BARRIER

THE INDUSTRY LEADER IN VAPOUR BARRIERS





# STEGO™ WRAP VAPOUR BARRIER



## **FEATURES & BENEFITS:**

- Unsurpassed Performance Track Record
- Longevity and Strength
- Exceptional Tear and Puncture Resistance
- Easy, Reliable Installation
- Competitively Priced
- Life of the Building Warranty
- Installation Support

Our clients have made Stego Wrap the most widely-specified vapour barrier in North America. STEGO WRAP VAPOUR BARRIER is made with our proven trade secret blend of prime virgin resins and additives. Stego Wrap 15-Mil Vapour Barrier is an ASTM E1745 Class A Vapour Barrier (Below 0.01 perms). We focus on producing a product that will maintain its extremely low permeance. The protection of Stego Wrap Vapour Barrier provides the flexibility to change flooring types and overall building use without worrying about below-slab moisture vapour.





**Since 1998**, Stego's engineered films have revolutionized the way the construction industry defends against harmful moisture vapour and soil gases with its flagship product: Stego Wrap Vapour Barrier – which dramatically improves performance against moisture intrusion over conventional methods.

- Stego Wrap 20-Mil Vapour Barrier (Class A)
- Stego Wrap 15-Mil Vapour Barrier (Class A)



# THE STEGO" WRAP ADVANTAGE



## SUPERIOR DEFENSE AGAINST FLOOR FAILURES:

Infiltration of moisture through concrete slabs is a major building defect liability. Stego Wrap Vapour Barrier has an extremely low permeance rating, helping to prevent water vapour, and soil gases (i.e. Radon) from compromising the integrity of the building envelope and leading to serious problems with the concrete slab, floor coverings and indoor air quality. Stego Wrap Vapour Barrier is the best protection against these costly failures.



### **MOULD PREVENTION:**

Mould needs three things to survive: moisture, sustained temperature (approximately between 10° and 50° C), and a food source (dust, drywall, etc.). In any given building environment, contractors can only control one of these variables: moisture. Mould spores are present in 100% of building interiors. If moisture is allowed into your building environment, mould can and will grow. Toxic moulds like Stachybotyrus can be fatal for nearly 5% of people (Institute of Medicine 1993), and cause a variety of serious health problems in others. Several recent well-publicised cases involving toxic mould have resulted in multimillion-dollar insurance settlements. Many leading insurance companies have severely limited or removed coverage for mould claims fearing that these claims will bankrupt their companies. Now more than ever, it is critically important that extra attention be paid to preventing the intrusion of moisture vapour from your below-slab environment. Stego Wrap Vapour Barrier offers the level of protection that many architects and engineers are now seeking and is considered to be inexpensive insurance against these costly failures.



## LONGEVITY AND STRENGTH:

There is really only one chance to select and install a below-slab vapour barrier, before the slab is placed. So, material strength and longevity are critical to the system's success. Stego Wrap Vapour Barrier is engineered to get through difficult installation conditions without puncturing or tearing easily, and the prime virgin resins used to create Stego Wrap Vapour Barrier help ensure long-term performance.



## STEGO LIFE OF THE BUILDING WARRANTY:

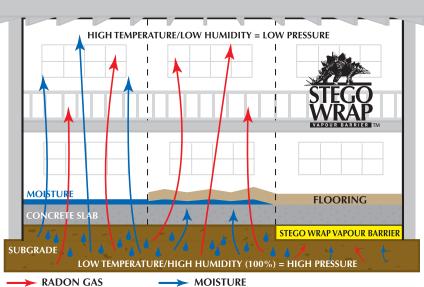
Stego offers the **first-of-its-kind warranty** for its line of Stego Wrap vapour barriers and retarders. **The warranty reinforces the 20-year track record without a single claim of product failure.** 

Warranty available online at www.stegoindustries.com/legal



# STEGO™ WRAP STANDS THE TEST OF TIME

It's the side of the building you never see, but it's the foundation that keeps your structure safe. Stego Industries creates the game-changing barriers below your building's floor slab.



Regardless of the location of the water table, humidity below concrete slabs approximates 100%. Typical below slab vapour pressure is more than twice that of building interiors at room temperature, creating vapour drive from the substrate, up through the slab, and into the building.

# STEGO™ WRAP VAPOUR BARRIER SPECIFICATIONS

	TEST	ASTM E1745 CLASS A REQUIREMENTS		TEST RESULT			
PROPERTIES	METHOD	METRIC	IMPERIAL	METRIC	IMPERIAL	EXPLANATION	
Permeance (perms)	ASTM F1249	6 ng/(m²*s*Pa)	0.1 gr/(ft <sup>2</sup> *hr*in-Hg)	<b>0.49</b> ng/(m <sup>2</sup> *s*Pa)	<b>0.0086</b> gr/(ft <sup>2</sup> *hr*in-Hg)	Very impermeable to water vapour	
Puncture Resistance	ASTM D1709	2,200 grams		Method B 2,266 grams		Resistant to puncturing from construction abuse	
Tensile Strength	ASTM D882	7.9 kN/m	45.0 lbf/in	12.4 kN/m	70.6 lbf/in	Will not tear easily	
	ASTM E154 Section 8	6 ng/(m <sup>2</sup> *s*Pa)	0.1 gr/(ft <sup>2</sup> *hr*in-Hg)	0.56 ng/(m <sup>2</sup> *s*Pa)	0.0098 gr/(ft <sup>2</sup> *hr*in-Hg)	Permeance after wetting, drying and soaking	
Permeance After Conditioning	ASTM E154 Section 11	<b>6</b> ng/(m <sup>2</sup> *s*Pa)	0.1 gr/(ft <sup>2</sup> *hr*in-Hg)	0.52 ng/(m <sup>2</sup> *s*Pa)	<b>0.0091</b> gr/(ft <sup>2</sup> *hr*in-Hg)	Permeance after heat conditioning	
(ASTM E1745 Sections 7.1.2 - 7.1.5)	ASTM E154 Section 12	6 ng/(m²*s*Pa)	0.1 gr/(ft <sup>2</sup> *hr*in-Hg)	0.56 ng/(m <sup>2</sup> *s*Pa)	0.0097 gr/(ft <sup>2</sup> *hr*in-Hg)	Permeance after low temperature conditioning	
	ASTM E154 Section 13	6 ng/(m <sup>2</sup> *s*Pa)	0.1 gr/(ft <sup>2</sup> *hr*in-Hg)	0.54 ng/(m <sup>2</sup> *s*Pa)	0.0095 gr/(ft <sup>2</sup> *hr*in-Hg)	Permeance after soil organism exposure	
Methane Transmission Rate	ASTM D1434			**GTR = mL(STP)/		Greatly impedes the transmission of methane gas	
Radon Diffusion Coefficient	K124/02/95			8.8 x 10 <sup>-12</sup> i	m²/second	Greatly impedes the transmission of radon gas	
Thickness				0.38 mm	15 mil	Stronger, tougher and less permeable than much thicker membranes	
Roll Dimensions		width x length: area:		4.3 m x 42.7 m 180 m <sup>2</sup>	14' x 140' 1,960 ft <sup>2</sup>	Allows for a minimum of seams	
Roll Weight				63 kg	140 lb	Easy to unroll and install	

GTR = Gas Transmission Rate



# Stego's Full Line of Engineered ACCESSORY PRODUCTS

Stego also offers the accessories needed for an ASTM E1643-compliant installation, which have been engineered for our Stego Wrap line: Stego™ Tape, Stego™ Mastic, StegoTack™ Tape, Stego™ Crete Claw™ Tape, and Stego™ Term Bar. Using these products enables an efficient installation, saving time and resources while maintaining the integrity of the vapour barrier system.



#### Stego Tape

This adhesive is pressuresensitive, making it ideal for sealing Stego Wrap seams and penetrations.



### Stego Mastic

A liquid Vapour retardant membrane, designed to be used with Stego Wrap, for sealing utility and pipe penetrations.



#### StegoTack Tape

A double-sided adhesive strip used to bond and seal Stego Wrap to concrete, masonry, wood, metal, and other surfaces.



#### Stego Crete Claw Tape

A multi-layered tape/detail strip that will mechanically seal Stego Wrap Vapour Barrier to concrete.



## BEAST™ CONCRETE ACCESSORIES - VAPOUR BARRIER SAFE

Stego Industries recommends the use of BEAST vapour barrier-safe concrete accessories, to help eliminate the use of non-permanent penetrations in Stego Wrap installations.



# BEAST™ FOOT FORMING UTILITY

Beast Foot, with its engineered peeland-stick base, allows the use of blunt-end and threaded nail stakes to be used without puncturing the allimportant Stego Wrap Vapour Barrier.



## **BEAST™ SCREED** is a

fixed-elevation, point-topoint guide screed system designed to replace common wet-screed methods.



#### BEAST™ HOOK is a

faster, easier way to set 2x4 overhead screeds. Engineered to be re-used over and over again for maximum value.

## Stego INSTALLATION

As with any protection system, the installation of **Stego Wrap** is critical to the system's effectiveness. **Stego Wrap**, **Stego Accessories** and **Beast Concrete Accessories** make it easy to complete a successful installation. Refer to the complete Stego Wrap Installation Instructions on the website at **www.stegoindustries.com** 

STEGO<sup>™</sup>
INSTALLATION
SUPPORT





## PEACE OF MIND IS OF GREAT VALUE... A FREE SERVICE OFFERED BY STEGO INDUSTRIES

When you choose **Stego™ Barrier Solutions** and products, you gain access to a large network of full-time technical sales representatives providing unmatched local support and service.



Stego Installation Support - where our industry leading experts back up the high quality of our products.

Please contact us to get in touch with the nearest Stego re
We look forward to working with you on your next project.
+1 (877) /// -792/ | warm of a contact with the nearest Stego re Please contact us to get in touch with the nearest Stego representative.

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## STEGO™ WRAP 15-MIL VAPOUR BARRIER

A STEGO INDUSTRIES, LLC INNOVATION | VAPOUR RETARDERS 07 26 00, 03 30 00 | VERSION: 31 DEC 2018

1. PRODUCT NAME

STEGO WRAP 15-MIL VAPOUR BARRIER

2. MANUFACTURER

Stego Industries, LLC 216 Avenida Fabricante, Suite 101 San Clemente, CA 92672 USA Sales, Technical Assistance Ph: +1 (877) 464-7834 international@stegoindustries.com www.stegoindustries.com



## 3. PRODUCT DESCRIPTION

USES: Stego Wrap 15-Mil Vapour Barrier is used as a below-slab vapour barrier.

COMPOSITION: Stego Wrap 15-Mil Vapour Barrier is a multi-layer plastic extrusion manufactured with only high grade prime, virgin, polyolefin resins.

ENVIRONMENTAL FACTORS: Stego Wrap 15-Mil Vapour Barrier can be used in systems for the control of soil gases (radon, methane), soil poisons (oil by-products) and sulfates.

## 4. TECHNICAL DATA

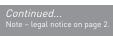
## **TABLE 1: PHYSICAL PROPERTIES OF STEGO WRAP 15-MIL VAPOUR BARRIER**

PROPERTY	TEST	RESULTS	
Under Slab Vapour Retarders	ASTM E1745 Class A, B & C- Standard Specification for Water Vapour Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs	rs Exceeds Class A, B & C	
	Permeance Units (perms):	ng/(m <sup>2</sup> *s*Pa)	gr/(ft <sup>2</sup> *hr*in-Hg)
Water Vapour Permeance	ASTM F1249 – Test Method for Water Vapour Transmission Rate Through Plastic Film and Sheeting Using a Modulated Infrared Sensor	0.49	0.0086
Permeance After Conditioning (ASTM E1745 Sections 7.1.2 - 7.1.5)	ASTM E154 Section 8, F1249 – Permeance after wetting, drying, and soaking ASTM E154 Section 11, F1249 – Permeance after heat conditioning ASTM E154 Section 12, F1249 – Permeance after low temperature conditioning ASTM E154 Section 13, F1249 – Permeance after soil organism exposure	0.56 0.52 0.56 0.54	0.0098 0.0091 0.0097 0.0095
Methane Transmission Rate	ASTM D1434 – Standard Test Method for Determining Gas Permeability Characteristics of Plastic Film and Sheeting	GTR - 192.8 mL(STP)/m	
Radon Diffusion Coefficient	K124/02/95	8.8 x 10 <sup>-12</sup> n	n²/second
Puncture Resistance	ASTM D1709 – Test Method for Impact Resistance of Plastic Film by Free-Falling Dart Method	2,266 gram	S
Tensile Strength	ASTM D882 – Test Method for Tensile Properties of Thin Plastic Sheeting	12.4 kN/m	[70.6 lbf/in]
Thickness		0.38 mm (1	5 mil)
Roll Dimensions	width x length: area:	4.3 m x 42.7 180 m <sup>2</sup> (1,9	7 m (14' x 140') 60 ft <sup>2</sup> )
Roll Weight		63 kg (140 l	b)

Note: GTR = Gas Transmission Rate









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## 5. INSTALLATION

UNDER SLAB: Unroll Stego Wrap 15-Mil Vapour Barrier over an aggregate, sand or tamped earth base. Overlap all seams a minimum of 150 mm (6") and tape using  $Stego^{TM}$  Tape or  $Stego^{TM}$  Crete  $Claw^{TM}$  Tape. All penetrations must be sealed using a combination of Stego Wrap and Stego accessories.

For additional information, please refer to Stego's complete installation instructions.

## 6. AVAILABILITY & COST

Stego Wrap 15-Mil Vapour Barrier is available through our network of building supply distributors. For current cost information, contact your local Stego Wrap distributor or Stego Industries' Sales Representative.

## 7. WARRANTY

Stego Industries, LLC believes to the best of its knowledge, that specifications and recommendations herein are accurate and reliable. However, since site conditions are not within its control, Stego Industries does not guarantee results from the use of the information provided herein. Stego Industries, LLC does offer a limited warranty on Stego Wrap. Please see www.stegoindustries.com/legal.

## 8. MAINTENANCE

None required.

## 9. TECHNICAL SERVICES

Technical advice, custom CAD drawings, and additional information can be obtained by contacting Stego Industries or by visiting the website.

**Email:** international@stegoindustries.com

**Contact Number:** +1 (877) 464-7834

**Website:** www.stegoindustries.com

## 10. FILING SYSTEMS

• www.stegoindustries.com





## STEGO™ MASTIC

A STEGO INDUSTRIES, LLC INNOVATION | VAPOUR RETARDERS 07 26 00, 03 30 00 | VERSION: 27 JUN 2018

# 1. PRODUCT NAME STEGO MASTIC

## 2. MANUFACTURER

Stego Industries, LLC 216 Avenida Fabricante, Suite 101 San Clemente, CA 92672 USA Sales, Technical Assistance Ph: +1 (877) 464-7834 international@stegoindustries.com www.stegoindustries.com



## 3. PRODUCT DESCRIPTION

USES: Stego Mastic is designed to be used as a vapour retardant membrane for use in conjunction with Stego™ Wrap Vapour Barrier/Retarder. Stego Mastic can be used for sealing utility and pipe penetrations in Stego Wrap.

COMPOSITION: Stego Mastic is a medium viscosity, water-based, polymer-modified anionic bituminous/asphalt emulsion.

SIZE: Stego Mastic comes in 7.57-litre (2 gal) or 18.9-litre (5 gal) pails, and 591-millilitre (20 oz) sausage tubes.

## 4.) TECHNICAL DATA

## **TABLE 1: PHYSICAL PROPERTIES OF STEGO MASTIC**

PROPERTY	TEST	RESULTS
Tensile	ASTM D412	221 kPa (32 psi)
Elongation	ASTM D412	3860%
Resistance to Decay	ASTM E154	10% perm loss
Accelerated Aging	ASTM G23	No Effect
Permeance	ASTM E96 (perms)	9.7 ng/(m <sup>2</sup> *s*Pa) (0.17 gr/(ft <sup>2</sup> *hr*in-Hg))
Hydrostatic Water Pressure	ASTM D751	193 kPa (28 psi)
Adhesion to Concrete & Masonry	ASTM C836	1.2 kN/m (7 lbf/in)
Hardness	ASTM C836	75
Crack Bridging	ASTM C836	No Cracking
Low Temp Flexibility	ASTM C836	No Cracking

## STEGO™ MASTIC

A STEGO INDUSTRIES, LLC INNOVATION | VAPOUR RETARDERS 07 26 00, 03 30 00 | VERSION: 27 JUN 2018

# 5. INSTALLATION

#### PREPARATION:

- A test application simulating the project environment should always be done prior to final usage of Stego Mastic.
- All Surfaces should be dry and free of loose materials, oils and other contaminants. The surfaces should be cleaned in the same fashion as the test surface in order to ensure proper results.
- Store above 4°C, and apply above 4°C and below 38°C.

#### PENETRATIONS:

To repair penetrations in Stego Wrap, cut Stego Wrap just big enough to fit over and around the penetration so as to minimise void space. Liberally apply Stego Mastic around the penetration to keep the integrity of the membrane intact. Stego Mastic can be applied from sausage tubes with a standard sausage gun and/or from pails by brush, roller, or trowel.

NOTES: 1) If needed to minimise void space around penetrations, utilise a detail patch of Stego Wrap or Stego Pre-Cut Pipe Boot to fit over the penetration and seal the patch/boot with Stego Tape prior to applying Stego Mastic. 2) Solvent-based products should not be applied over this product. 3) Clean all tools with kerosene and/or oil-based cleaners.

For additional information, please refer to Stego's complete installation instructions.

## 6. AVAILABILITY & COST

Stego Mastic is available through our network of building supply distributors. For current cost information, contact your local Stego distributor or Stego Industries' Sales Representative.

# 7. WARRANTY

Stego Industries, LLC believes to the best of its knowledge, that specifications and recommendations herein are accurate and reliable. However, since site conditions are not within its control, Stego Industries does not guarantee results from the use of the information provided and disclaims all liability from any loss or damage. NO WARRANTY, EXPRESS, IMPLIED OR STATUTORY, IS GIVEN AS TO THE MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OTHERWISE WITH RESPECT TO THE PRODUCTS REFERRED TO. Please see www.stegoindustries.com/legal.

## 8. MAINTENANCE

None required.

# 9. TECHNICAL SERVICES

Technical advice, custom CAD drawings, and additional information can be obtained by contacting Stego Industries or by visiting the website.

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## STEGO™ TAPE

A STEGO INDUSTRIES, LLC INNOVATION | VAPOUR RETARDERS 07 26 00, 03 30 00 | VERSION: 31 DEC 2018

# 1. PRODUCT NAME STEGO TAPE

## 2. MANUFACTURER

Stego Industries, LLC 216 Avenida Fabricante, Suite 101 San Clemente, CA 92672 USA Sales, Technical Assistance Ph: +1 (877) 464-7834 international@stegoindustries.com www.stegoindustries.com



# 3. PRODUCT DESCRIPTION

USES: Stego Tape is a low-permeance tape designed for protective sealing, hanging, seaming, splicing, and patching applications where a highly conformable material is required. It has been engineered to bond specifically to Stego™ Wrap, making it ideal for sealing Stego Wrap seams and penetrations.

COMPOSITION: Stego Tape is composed of polyethylene film and an acrylic, pressure-sensitive adhesive.

SIZE: Stego Tape is 10 cm x 55 m (3.75" x 180'). Stego Tape ships 12 rolls in a case.

## 4.) TECHNICAL DATA

### APPLICABLE STANDARDS:

Pressure Sensitive Tape Council (PSTC)

• PSTC 101 - International Standard for Peel Adhesion of Pressure-Sensitive Tape

American Society for Testing & Materials (ASTM)

• ASTM E1643 - Standard Practice for Selection, Design, Installation, and Inspection of Water Vapour Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs

**TABLE 4.1: PHYSICAL PROPERTIES OF STEGO TAPE** 

PROPERTY	RESULTS		
Dimensions	10 cm x 55 m (3.75" x 180')		
Total Thickness	0.15 mm (6 mil)		
Permeance (perms)	1.7 ng/(m²*s*Pa) (0.03 gr/(ft²*hr*in-Hg))		
Tensile Strength	3 kN/m (17 lb/in)		
Elongation (at break) MD	1060%		
Adhesion (20 min dwell ss, PSTC 101)	0.92 kN/m (84 oz/in)		
Ultraviolet Resistance	Excellent		

## STEGO™ TAPE

A STEGO INDUSTRIES, LLC INNOVATION | VAPOUR RETARDERS 07 26 00, 03 30 00 | VERSION: 31 DEC 2018

## 5. INSTALLATION

SEAMS: Overlap Stego Wrap 150 mm (6") and seal with Stego Tape. Make sure the area of adhesion is free from dust, dirt, moisture and frost to allow maximum adhesion of the pressure sensitive tape.

#### PIPE PENETRATION SEALING

- 1) Install Stego Wrap around pipe by slitting/cutting material
- 2) If void space around pipe is minimal, seal around base of pipe with Stego Tape (Stego™ Mastic can be used for additional coverage)

### DETAIL PATCH FOR PIPE PENETRATION SEALING

- 1) Cut a piece of Stego Wrap that creates a 150 mm (6") overlap around all edges of the void space
- 2) Cut an "X" in the centre of the detail patch
- 3) Slide detail patch over pipe, secure tightly
- 4) Tape down all sides of detail patch with Stego Tape
- 5) Seal around base of pipe with Stego Tape (Stego Mastic can be used for additional coverage)

Stego Tape should be installed above 4°C. In temperatures below 4°C take extra care to remove moisture or frost from the area of adhesion.

For additional information, please refer to Stego's complete installation instructions.

## 6. AVAILABILITY & COST

Stego Tape is available through our network of building supply distributors. For current cost information, contact your local Stego Wrap distributor or Stego Industries' Sales Representative.

## 7. WARRANTY

Stego Industries, LLC believes to the best of its knowledge, that specifications and recommendations herein are accurate and reliable. However, since site conditions are not within its control, Stego Industries does not guarantee results from the use of the information provided herein. Stego Industries, LLC does offer a limited warranty on Stego Wrap. Please see www.stegoindustries.com/legal.

## 8. MAINTENANCE

None required.

## 9. TECHNICAL SERVICES

Technical advice, custom CAD drawings, and additional information can be obtained by contacting Stego Industries or by visiting the website.

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## STEGO™ CRETE CLAW™ TAPE (75 mm wide)

A STEGO INDUSTRIES, LLC INNOVATION | VAPOUR RETARDERS 07 26 00, 03 30 00 | VERSION: 31 DEC 2018

# 1. PRODUCT NAME STEGO CRETE CLAW TAPE (75 mm wide)

## 2. MANUFACTURER

Stego Industries, LLC 216 Avenida Fabricante, Suite 101 San Clemente, CA 92672 USA Sales, Technical Assistance Ph: +1 (877) 464-7834 international@stegoindustries.com www.stegoindustries.com



## 3. PRODUCT DESCRIPTION

USES: Stego Crete Claw Tape is a multi-layered tape that is used to seal Stego™ Wrap Vapour Barrier to the perimeter of the slab while the concrete is placed. Stego Crete Claw Tape allows wet concrete to cast into the textured top surface to form a mechanical bond/seal.

COMPOSITION: Stego Crete Claw Tape is composed of polyethylene film, aperture film, and an acrylic, pressure-sensitive adhesive.

SIZE: Stego Crete Claw Tape is 75 mm (3") x 55 m (180'). Stego Crete Claw Tape (75 mm Wide) ships 16 rolls in a case.

## 4. TECHNICAL DATA

### TABLE 4.1: PHYSICAL PROPERTIES OF STEGO CRETE CLAW TAPE (75 mm wide)

PROPERTY	RESULTS
Dimensions	75 mm x 55 m (3" x 180')
Total Thickness	0.66 mm (26 mil)
Permeance: ASTM F1249	1.7 ng/(m²*s*Pa) (0.03 gr/(ft²*hr*in-Hg))
180° Adhesion Peel Strength: ASTM D903	3.1 kN/m (17.6 lbf/in)
Sheer Adhesion Strength: 6.5 cm² (1 in²) shear test using an Instron 3345 Machine	>338 kPa (>49 lbf/in²)*

<sup>\*</sup> Specimens failed by stretching vapour barrier to failure before pulling Crete Claw from concrete.

# 5. INSTALLATION

SECURING STEGO WRAP TO SLAB: Clean surface of Stego Wrap to ensure that it is free of moisture, frost, dirt, and debris prior to the installation of Stego Crete Claw Tape. When ready to apply Stego Crete Claw Tape, peel back the release liner and apply to Stego Wrap. Stego Crete Claw Tape should be completely on Stego Wrap.

To detail, cut Stego Crete Claw Tape with a box knife or scissors. Stego Crete Claw Tape should be installed above 4°C for maximum adhesion. For additional information please refer to Stego's complete installation instructions.

TIP: Wrap the release liner back over the entire roll while unrolling Stego Crete Claw Tape. This technique will allow the release liner to pull off easily and keep it out of the way.

## STEGO™ CRETE CLAW™ TAPE (75 mm wide)

A STEGO INDUSTRIES, LLC INNOVATION | VAPOUR RETARDERS 07 26 00, 03 30 00 | VERSION: 31 DEC 2018

# 6. AVAILABILITY & COST

Stego Crete Claw Tape is available through our network of building supply distributors. For current cost information, contact your local Stego Wrap distributor or Stego Industries' Sales Representative.

# 7. WARRANTY

Stego Industries, LLC believes to the best of its knowledge, that specifications and recommendations herein are accurate and reliable. However, since site conditions are not within its control, Stego Industries does not guarantee results from the use of the information provided herein. Stego Industries, LLC does offer a limited warranty on Stego Wrap. Please see www.stegoindustries.com/legal.

# 8. MAINTENANCE

Store Stego Crete Claw Tape in a dry and temperate area.

# 9. TECHNICAL SERVICES

Technical advice, custom CAD drawings, and additional information can be obtained by contacting Stego Industries or by visiting the website.

**Email:** international@stegoindustries.com

Contact Number: +1 (877) 464-7834

**Website:** www.stegoindustries.com

## 10. FILING SYSTEMS

• www.stegoindustries.com





# STEGO™ CRETE CLAW™ TAPE (150 mm wide)

A STEGO INDUSTRIES, LLC INNOVATION | VAPOUR RETARDERS 07 26 00, 03 30 00 | VERSION: 31 DEC 2018

## 1. PRODUCT NAME

STEGO CRETE CLAW TAPE (150 mm wide)

## 2. MANUFACTURER

Stego Industries, LLC 216 Avenida Fabricante, Suite 101 San Clemente, CA 92672 USA Sales, Technical Assistance Ph: +1 (877) 464-7834 international@stegoindustries.com www.stegoindustries.com



## 3. PRODUCT DESCRIPTION

USES: Stego Crete Claw Tape is a multi-layered tape that is used to seal Stego™ Wrap Vapour Barrier to the perimeter of the slab while the concrete is placed. Stego Crete Claw Tape allows wet concrete to cast into the textured top surface to form a mechanical bond/seal.

COMPOSITION: Stego Crete Claw Tape is composed of polyethylene film, aperture film, and an acrylic, pressure-sensitive adhesive.

SIZE: Stego Crete Claw Tape is 150 mm (6") x 55 m (180'). Stego Crete Claw Tape (150 mm Wide) ships 8 rolls in a case.

## 4.) TECHNICAL DATA

### TABLE 4.1: PHYSICAL PROPERTIES OF STEGO CRETE CLAW TAPE (150 mm wide)

PROPERTY	RESULTS
Dimensions	150 mm x 55 m (6" x 180')
Total Thickness	0.66 mm (26 mil)
Permeance: ASTM F1249	1.7 ng/(m²*s*Pa) (0.03 gr/(ft²*hr*in-Hg))
180° Adhesion Peel Strength: ASTM D903	3.1 kN/m (17.6 lbf/in)
Sheer Adhesion Strength: 6.5 cm² (1 in²) shear test using an Instron 3345 Machine	>338 kPa (>49 lbf/in²)*

<sup>\*</sup> Specimens failed by stretching vapour barrier to failure before pulling Crete Claw from concrete.

# 5. INSTALLATION

SECURING STEGO WRAP TO SLAB: Clean surface of Stego Wrap to ensure that it is free of moisture, frost, dirt, and debris prior to the installation of Stego Crete Claw Tape. When ready to apply Stego Crete Claw Tape, peel back the release liner and apply to Stego Wrap. Stego Crete Claw Tape should be completely on Stego Wrap.

To detail, cut Stego Crete Claw Tape with a box knife or scissors. Stego Crete Claw Tape should be installed above 4°C for maximum adhesion. For additional information please refer to Stego's complete installation instructions.

TIP: Wrap the release liner back over the entire roll while unrolling Stego Crete Claw Tape. This technique will allow the release liner to pull off easily and keep it out of the way.

## STEGO™ CRETE CLAW™ TAPE (150 mm wide)

A STEGO INDUSTRIES, LLC INNOVATION | VAPOUR RETARDERS 07 26 00, 03 30 00 | VERSION: 31 DEC 2018

## 6. AVAILABILITY & COST

Stego Crete Claw Tape is available through our network of building supply distributors. For current cost information, contact your local Stego Wrap distributor or Stego Industries' Sales Representative.

# 7. WARRANTY

Stego Industries, LLC believes to the best of its knowledge, that specifications and recommendations herein are accurate and reliable. However, since site conditions are not within its control, Stego Industries does not guarantee results from the use of the information provided herein. Stego Industries, LLC does offer a limited warranty on Stego Wrap. Please see www.stegoindustries.com/legal.

# 8. MAINTENANCE

Store Stego Crete Claw Tape in a dry and temperate area.

# 9. TECHNICAL SERVICES

Technical advice, custom CAD drawings, and additional information can be obtained by contacting Stego Industries or by visiting the website.

**Email:** international@stegoindustries.com

Contact Number: +1 (877) 464-7834

**Website:** www.stegoindustries.com

## 10. FILING SYSTEMS

• www.stegoindustries.com





## **STEGOTACK™ TAPE**

A STEGO INDUSTRIES, LLC INNOVATION | VAPOUR RETARDERS 07 26 00, 03 30 00 | VERSION: 20 JUL 2018

# 1. PRODUCT NAME STEGOTACK TAPE

## 2. MANUFACTURER

Stego Industries, LLC 216 Avenida Fabricante, Suite 101 San Clemente, CA 92672 USA Sales, Technical Assistance Ph: +1 (877) 464-7834 international@stegoindustries.com www.stegoindustries.com



# 3. PRODUCT DESCRIPTION

USES: StegoTack Tape is a double-sided adhesive strip used to bond and seal Stego™ Wrap Vapour Barrier to concrete, masonry, wood, metal, and other surfaces. StegoTack Tape is a flexible and mouldable material to allow for a variety of applications and installations.

COMPOSITION: StegoTack Tape is made from a blend of synthetic rubber and resins.

SIZE: StegoTack Tape is 51 mm x 15 m (2" x 50'). StegoTack Tape ships 12 rolls in a case.

## 4. TECHNICAL DATA

## **TABLE 4.1: PHYSICAL PROPERTIES OF STEGOTACK TAPE**

PROPERTY	RESULTS
Dimensions	51 mm x 15 m (2" x 50')
Total Thickness	0.76 mm (30 mil)
Permeance (at 0.76 mm/30 mil)	1.7 ng/(m²*s*Pa) (0.03 gr/(ft²*hr*in-Hg))
Colour	Grey
Material	Synthetic rubber blend
Adhesion to Steel	2.19 kN/m (12.5 lb/in) width ASTM D1000
Installation Temperature	4°C/43°C (40°F/110°F)
In Service Temperature Range	-29°C/60°C (-20°F/+140°F)
VOC Content	No VOCs, 100% solids

## 5. INSTALLATION

TO WALLS: Make sure the area of adhesion is free of dust, dirt, debris, moisture, and frost to allow maximum adhesion. Remove release liner on one side and stick to desired surface. When ready to apply Stego Wrap, remove the exposed release liner and press Stego Wrap firmly against StegoTack Tape to secure.

Cut StegoTack Tape using a utility knife or scissors. Cut StegoTack Tape before removing the release liner for easier cutting. Install StegoTack Tape between 4°C and 43°C. For additional information please refer to Stego's complete installation instructions.

## STEGOTACK™ TAPE

A STEGO INDUSTRIES, LLC INNOVATION | VAPOUR RETARDERS 07 26 00, 03 30 00 | VERSION: 20 JUL 2018

## 6. AVAILABILITY & COST

StegoTack Tape is available through our network of building supply distributors. For current cost information, contact your local Stego Wrap distributor or Stego Industries' Sales Representative.

# 7. WARRANTY

Stego Industries, LLC believes to the best of its knowledge, that specifications and recommendations herein are accurate and reliable. However, since site conditions are not within its control, Stego Industries does not guarantee results from the use of the information provided herein. Stego Industries, LLC does offer a limited warranty on Stego Wrap. Please see www.stegoindustries.com/legal.

# 8. MAINTENANCE

For longer adhesive life, store in dry, temperate area.

# 9. TECHNICAL SERVICES

Technical advice, custom CAD drawings, and additional information can be obtained by contacting Stego Industries or by visiting the website.

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**Website:** www.stegoindustries.com

## 10. FILING SYSTEMS

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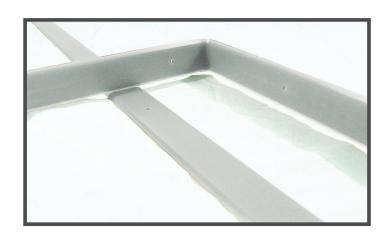
## STEGO™ TERM BAR

A STEGO INDUSTRIES, LLC INNOVATION | VAPOUR RETARDERS 07 26 00, 03 30 00 | VERSION: 31 DEC 2018

# 1. PRODUCT NAME STEGO TERM BAR

## 2. MANUFACTURER

Stego Industries, LLC 216 Avenida Fabricante, Suite 101 San Clemente, CA 92672 USA Sales, Technical Assistance Ph: +1 (877) 464-7834 international@stegoindustries.com www.stegoindustries.com



## 3. PRODUCT DESCRIPTION

USES: Stego Term Bar is a semi-flexible plastic termination bar used for mechanically securing Stego™ Wrap or other materials to concrete, masonry, or wood.

COMPOSITION: Stego Term Bar is made from post-industrial recycled PVC.

SIZE: Stego Term Bar is 1.2 m x 28.6 mm (4' x 1.125").

## 4.) TECHNICAL DATA

#### **TABLE 4.1: PHYSICAL PROPERTIES OF STEGO TERM BAR**

PROPERTY	RESULTS
Dimensions	1.2 m x 28.6 mm (4' x 1.125")
Colour	Grey
Material	Recycled PVC
Weight	132 grams (4.7 oz)

## 5. INSTALLATION

UNDER SLAB: Nail through Stego Term Bar and Stego Wrap to secure material as needed. If the beveled edge is facing the wall, a pocket/lip is created for mastic/sealant to be used if required. Pre-drilled nail holes are provided every 150 mm for ease of installation.

To cut Stego Term Bar, score with a utility knife or wire snips. Stego Term Bar can be bent back and forth and then broken at desired locations as well.

Stego Term Bar is flexible enough to bend around corners and contours in the wall for easy installation.

For additional information, please refer to Stego's complete installation instructions.

## STEGO™ TERM BAR

A STEGO INDUSTRIES, LLC INNOVATION | VAPOUR RETARDERS 07 26 00, 03 30 00 | VERSION: 31 DEC 2018

## **AVAILABILITY & COST**

Stego Term Bar is available through our network of building supply distributors. For current cost information, contact your local Stego Wrap distributor or Stego Industries' Sales Representative.

# **WARRANTY**

Stego Industries, LLC believes to the best of its knowledge, that specifications and recommendations herein are accurate and reliable. However, since site conditions are not within its control, Stego Industries does not guarantee results from the use of the information provided herein. Stego Industries, LLC does offer a limited warranty on Stego Wrap. Please see www.stegoindustries.com/legal.

# **MAINTENANCE**

Store above 16°C (60°F). Term Bar will become less flexible at lower temperatures.

# **TECHNICAL SERVICES**

Technical advice, custom CAD drawings, and additional information can be obtained by contacting Stego Industries or by visiting the website.

international@stegoindustries.com

Contact Number: +1 (877) 464-7834

Website: www.stegoindustries.com

## **FILING SYSTEMS**

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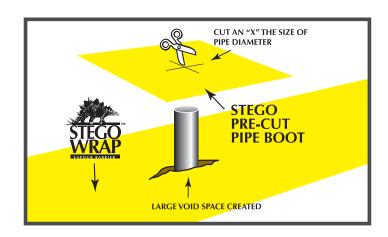
## STEGO™ PRE-CUT PIPE BOOTS

A STEGO INDUSTRIES, LLC INNOVATION | VAPOUR RETARDERS 07 26 00, 03 30 00 | VERSION: 20 JUL 2018

# 1. PRODUCT NAME STEGO PRE-CUT PIPE BOOTS

## 2. MANUFACTURER

Stego Industries, LLC 216 Avenida Fabricante, Suite 101 San Clemente, CA 92672 USA Sales, Technical Assistance Ph: +1 (877) 464-7834 international@stegoindustries.com www.stegoindustries.com



# 3. PRODUCT DESCRIPTION

USES: Stego Pre-Cut Pipe Boots are used to seal around permanent penetrations in Stego™ Wrap.

COMPOSITION: Stego Pre-Cut Pipe Boots are made from Stego Wrap Vapour Barrier (15-mil), and therefore are manufactured from only high grade prime, virgin, polyolefin resins.

SIZE: Stego Pre-Cut Pipe Boots are 450 mm x 450 mm (18" x 18") and 0.38 mm (15 mil) thick. Stego Pre-Cut Pipe Boots ship 10 packs of 25 in a case (250 boots per case).

## 4.) TECHNICAL DATA

## **TABLE 1: PHYSICAL PROPERTIES OF STEGO PRE-CUT PIPE BOOTS**

PROPERTY	TEST	RESULTS	
Under Slab Vapour Retarders	ASTM E1745 Class A, B & C- Standard Specification for Water Vapour Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs	Exceeds Class A, B & C	
	Permeance Units (perms):	ng/(m <sup>2</sup> *s*Pa)	gr/(ft <sup>2</sup> *hr*in-Hg)
Water Vapour Permeance	ASTM F1249 – Test Method for Water Vapour Transmission Rate Through Plastic Film and Sheeting Using a Modulated Infrared Sensor	0.49	0.0086
Permeance After Conditioning (ASTM E1745 Sections 7.1.2 - 7.1.5)	ASTM E154 Section 8, F1249 – Permeance after wetting, drying, and soaking ASTM E154 Section 11, F1249 – Permeance after heat conditioning ASTM E154 Section 12, F1249 – Permeance after low temperature conditioning ASTM E154 Section 13, F1249 – Permeance after soil organism exposure	0.56 0.52 0.56 0.54	0.0098 0.0091 0.0097 0.0095
Puncture Resistance	ASTM D1709 – Test Method for Impact Resistance of Plastic Film by Free-Falling Dart Method	2,266 gram	s
Tensile Strength	ASTM D882 – Test Method for Tensile Properties of Thin Plastic Sheeting	12.4 kN/m	(70.6 lbf/in)
Thickness		0.38 mm (1	5 mil)
Pipe Boot Dimensions	width x length:	450 mm x 450 mm (18" x 18")	

# 5. INSTALLATION

UNDER SLAB: Cut an "X" the size of the pipe diameter in the center of the Pre-Cut Pipe Boot and slide tightly over pipe. Tape all sides of the pipe boot with Stego™ Tape. Seal around the base of the pipe using Stego Tape and/or Stego™ Mastic.

For additional information, please refer to Stego's complete installation instructions.

## STEGO™ PRE-CUT PIPE BOOTS

A STEGO INDUSTRIES, LLC INNOVATION | VAPOUR RETARDERS 07 26 00, 03 30 00 | VERSION: 20 JUL 2018

# 6. AVAILABILITY & COST

Stego Pre-Cut Pipe Boots are available through our network of building supply distributors. For current cost information, contact your local Stego Wrap distributor or Stego Industries' Sales Representative.

# 7. WARRANTY

Stego Industries, LLC believes to the best of its knowledge, that specifications and recommendations herein are accurate and reliable. However, since site conditions are not within its control, Stego Industries does not guarantee results from the use of the information provided herein. Stego Industries, LLC does offer a limited warranty on Stego Wrap. Please see www.stegoindustries.com/legal.

# 8. MAINTENANCE

None required.

# 9. TECHNICAL SERVICES

Technical advice, custom CAD drawings, and additional information can be obtained by contacting Stego Industries or by visiting the website.

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Contact Number: +1 (877) 464-7834

Website: www.stegoindustries.com

## 10. FILING SYSTEMS

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# STEGO™ WRAP VAPOUR BARRIER/RETARDER INSTALLATION INSTRUCTIONS

**IMPORTANT:** Please read these installation instructions completely, prior to beginning any Stego Wrap installation. The following installation instructions are based on ASTM E1643 - Standard Practice for Selection, Design, Installation, and Inspection of Water Vapour Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs. If project specifications call for compliance with ASTM E1643, then be sure to review the specific installation sections outlined in the standard along with the techniques referenced in these instructions.

### FIGURE 1: UNDER-SLAB INSTALLATION

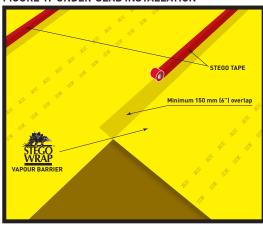
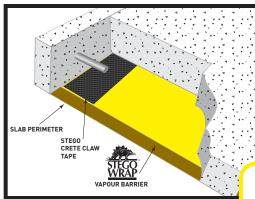


FIGURE 2a: SEAL TO SLAB AT PERIMETER



## **UNDER-SLAB INSTRUCTIONS:**

- Stego Wrap can be installed over an aggregate, sand, or tamped earth base. It is not necessary to have a cushion layer or sand base, as Stego Wrap is tough enough to withstand rugged construction environments.
- Unroll Stego Wrap over the area where the slab is to be placed. Stego Wrap should completely cover the concrete placement area. All joints/ seams both lateral and butt should be overlapped a minimum of 6" and taped using Stego<sup>™</sup> Tape.

NOTE: The area of adhesion should be free from dust, dirt, moisture, and frost to allow maximum adhesion of the pressure-sensitive tape.

ASTM E1643 requires sealing the perimeter of the slab. Extend vapour retarder over footings and seal to foundation wall, grade beam, or slab at an elevation consistent with the top of the slab or terminate at impediments such as waterstops or dowels. Consult the structural engineer of record before proceeding.

### **SEAL TO SLAB AT PERIMETER:\***

NOTE: Clean the surface of Stego Wrap to ensure that the area of adhesion is free from dust, dirt, moisture, and frost to allow maximum adhesion of the pressure-sensitive adhesive.

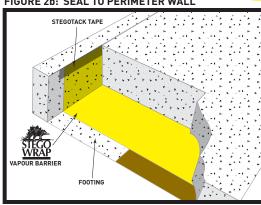
- Install Stego<sup>™</sup> Crete Claw<sup>™</sup> Tape on the entire perimeter edge of Stego Wrap.
- Prior to the placement of concrete, ensure that the top of Stego Crete Claw Tape is free of dirt, debris, or mud to maximise the bond to the concrete.

#### STEGO LABOUR SAVER!

This method not only complies with ASTM E1643, but it also:

- reduces labour compared to other perimeter sealing techniques.
- can be used even without an existing wall or footing, unlike alternatives.

## FIGURE 2b: SEAL TO PERIMETER WALL



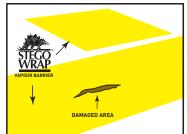
#### OR SEAL TO PERIMETER WALL WITH STEGOTACK™ TAPE:\*

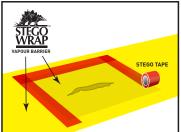
- Make sure area of adhesion is free of dust, dirt, debris, moisture, and frost to allow maximum adhesion.
- b. Remove release liner on one side and stick to desired surface.
- When ready to apply Stego Wrap, remove the exposed release liner and press Stego Wrap firmly against StegoTack Tape to secure.
- \* If ASTM E1643 is specified, consult with project architect and structural engineer to determine which perimeter seal technique should be employed for the project.

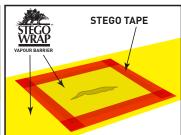


In the event that Stego Wrap is damaged during or after installation, repairs must be made. For holes, cut a piece of Stego Wrap to a size and shape that covers any damage by a minimum overlap of 150 mm (6") in all directions. Clean all adhesion areas of dust, dirt, moisture, and frost. Tape down all edges using Stego Tape (see figure 3, Sealing Damaged Areas).

#### FIGURE 3: SEALING DAMAGED AREAS









**NOTE:** Stego Industries recommends the use of vapour barrier-safe concrete accessories, like Beast™ Screed, to help minimise the amount of penetrations in a Stego Wrap Installation.



**IMPORTANT:** ALL PENETRATIONS MUST BE SEALED. All pipe, ducting, rebar, wire penetrations and block outs should be sealed using Stego Wrap, Stego Tape and/or Stego Mastic (see figure 4a, Pipe Penetration Sealing).

#### FIGURE 4a: PIPE PENETRATION SEALING







#### STEGO WRAP PIPE PENETRATION REPAIR DETAIL:

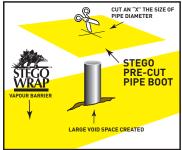
- 1: Install Stego Wrap around pipe penetrations by slitting/cutting material as needed. Try to minimise the void space created.
- 2: If Stego Wrap is close to pipe and void space is minimised then seal around pipe penetration with Stego Tape and/or Stego Mastic.

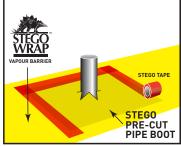
#### (See Figure 4a)

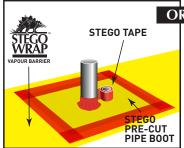
- 3: If detail patch is needed to minimise void space around penetration, then cut a detail patch to a size and shape that creates a 150 mm [6"] overlap on all edges around the void space at the base of the pipe. Stego Pre-Cut Pipe Boots are also available to speed up the installation.
- 4: Cut an "X" the size of the pipe diameter in the centre of the pipe boot and slide tightly over pipe.
- 5: Tape down all sides of the pipe boot with Stego Tape.
- 6: Seal around the base of the pipe using Stego Tape and/or Stego Mastic.

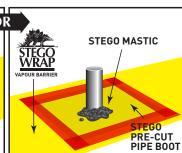
#### (See Figure 4b)

#### FIGURE 4b: DETAIL PATCH FOR PIPE PENETRATION SEALING









### FIGURE 5: MULTIPLE PIPE PENETRATION SEALING



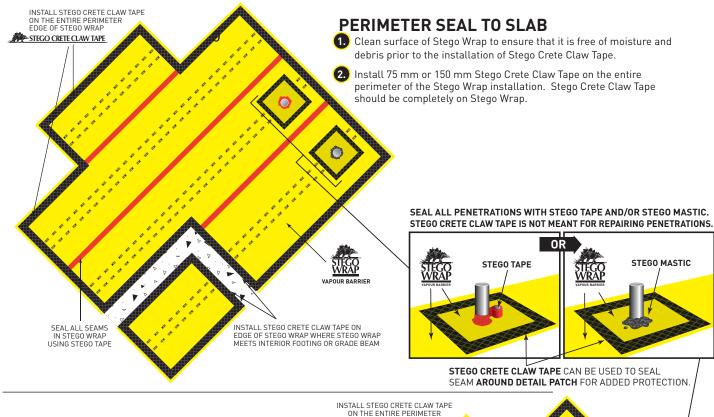
#### **MULTIPLE PIPE PENETRATION SEALING:**

Multiple pipe penetrations in close proximity and very small pipes may be sealed using Stego Wrap and Stego Mastic for ease of installation (see figure 5, Multiple Pipe Penetration Sealing).

**NOTE:** Stego Industries, LLC's ("Stego") installation instructions are based on ASTM E1643 - Standard Practice for Selection, Design, Installation, and Inspection of Water Vapour Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs. These instructions are meant to be used as a guide, and do not take into account specific job site situations. Consult local building codes and regulations along with the building owner or owner's representative before proceeding. If you have any questions regarding the above mentioned installation instructions or Stego products, please call us at +1 877-464-7834 for technical assistance. While Stego employees and representatives may provide technical assistance regarding the utility of a specific installation practice or Stego product, they are not authorised to make final design decisions.



# STEGO™ CRETE CLAW™ TAPE INSTALLATION INSTRUCTIONS

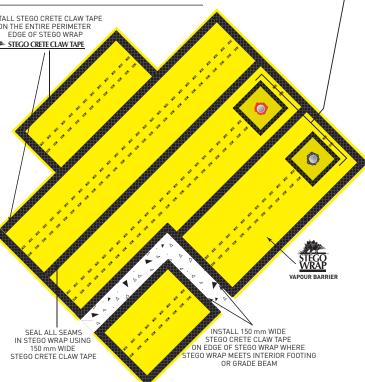


# SECURING STEGO WRAP TO THE BOTTOM OF THE SLAB

- Clean surface of Stego Wrap to ensure that it is free of moisture and debris prior to the installation of 150 mm wide Stego Crete Claw Tape.
- 2. Overlap seams a minimum of 150 mm (6"). Seal all seams in Stego Wrap using Stego Crete Claw Tape.
- 3. Install 150 mm wide Stego Crete Claw Tape on the entire perimeter of the Stego Wrap Installation. Stego Crete Claw Tape should be completely on Stego Wrap.
- Install additional Stego Crete Claw Tape if required. Lab and simulated field tests have shown that if 150 mm wide Stego Crete Claw Tape is installed on all seams and around the perimeter, then it is more than strong enough to support Stego Wrap. If determined by the architect or engineer, additional Stego Crete Claw Tape may be specified.
- 5) Prior to the placement of concrete, ensure that Stego Crete Claw Tape is free of dirt or debris to ensure maximum bond to the concrete.

These are general instructions. Installation requirements may change on a project-by-project basis.

**IMPORTANT** - For the application of securing Stego Wrap to the bottom of the slab, always use 150 mm wide Stego Crete Claw Tape.



**NOTE:** Stego Industries, LLC's ("Stego") installation instructions are based on ASTM E1643 - Standard Practice for Selection, Design, Installation, and Inspection of Water Vapour Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs. These instructions are meant to be used as a guide, and do not take into account specific job site situations. Consult local building codes and regulations along with the building owner or owner's representative before proceeding. If you have any questions regarding the above mentioned installation instructions or Stego products, please call us at +1 877-464-7834 for technical assistance. While Stego employees and representatives may provide technical assistance regarding the utility of a specific installation practice or Stego product, they are not authorised to make final design decisions.