#### U.S. DEPARTMENT OF HOMELAND SECURITY Federal Emergency Management Agency National Flood Insurance Program

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OMB No. 1660-0008 Expiration Date: November 30, 2022

## **ELEVATION CERTIFICATE**

Important: Follow the instructions on pages 1-9.

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/c	company and (3)	) building owner.
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					ty official, (2) insi		y, and (3) building owner. RANCE COMPANY USE
SECTION A – PROPERTY INFORMATION A1. Building Owner's Name			Policy Num				
Mark Victor							
A2. Building Stree Box No.	Address (in	cluding Apt., Unit, Suit	te, and/o	r Bldg. No.) o	r P.O. Route and	d Company N	AIC Number:
#100 North Sumne	r Avenue						
City				State		ZIP Code	
City of Margate				New Jer	•	08402	
A3. Property Desc Block 320 Lot 24	ription (Lot a	nd Block Numbers, Ta	ax Parcel	Number, Leg	gal Description, e	etc.)	
A4. Building Use (	e.g., Resider	ntial, Non-Residential,	Addition	, Accessory,	etc.) Residen	tial	
A5. Latitude/Longi	tude: Lat. <u>3</u>	9.3263	Long7	4.5106	Horizon	tal Datum: 🔲 NAD ′	927 🗙 NAD 1983
A6. Attach at least	2 photograp	hs of the building if th	e Certific	ate is being ι	ised to obtain flo	ood insurance.	
A7. Building Diagra	am Number	7					
A8. For a building	with a crawls	pace or enclosure(s):					
a) Square foo	tage of crawl	space or enclosure(s)			124.00 sq ft		
b) Number of	ermanent flo	ood openings in the cr	awlspace	e or enclosure	e(s) within 1.0 fo	ot above adjacent gra	ade 8
c) Total net ar	ea of flood op	penings in A8.b	1	600.00 sq ir	L .		
d) Engineered	flood openir	ngs? 🗙 Yes 🗌 N	No				
A9. For a building v	vith an attach	ned garage:					
a) Square foot	age of attach	ned garage		0.00 sq ft			
		ood openings in the at	tached g	arage within	1.0 foot above a	djacent grade 0	
c) Total net ar	ea of flood op	penings in A9.b		0.00 sq	in		
d) Engineered	flood openin	gs?	No				
					•		
	SE	CTION B - FLOOD	INSURA	NCE RATE	MAP (FIRM) IN	IFORMATION	
	-	Community Number		B2. County			B3. State
CITY OF MARGAT	E & 345	304		ATLANTIC	COUNTY		New Jersey
B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	Effe	RM Panel ective/	B8. Flood Zone(s)	B9. Base Flood E (Zone AO, us	levation(s) e Base Flood Depth)
34001C0434	F	08-28-2018	08-28-2	vised Date 2018	AE	8	
·		Base Flood Elevation	. ,		•	ed in Item B9:	
B11. Indicate eleva	ation datum u	used for BFE in Item B	89: 🗌 N	GVD 1929	X NAVD 1988	Other/Source:	
B12. Is the building	g located in a	Coastal Barrier Resc	ources Sy	/stem (CBRS	) area or Otherw	vise Protected Area (	DPA)? 🗌 Yes 🗶 No
Designation I	Date:		CBRS				

ELEVATION CERTIFICATE			OMB No. 166 Expiration Da	60-0008 ate: November 30, 2022
IMPORTANT: In these spaces, copy the corresp	onding information fro	m Section A.		ANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite #100 North Sumner Avenue			Policy Numb	
City City of Margate	State New Jersey	ZIP Code 08402	Company N/	AIC Number
SECTION C – BUILDI	NG ELEVATION INFO	RMATION (SURVEY R	EQUIRED)	
C1. Building elevations are based on:	nstruction Drawings*	] Building Under Constr		Finished Construction
*A new Elevation Certificate will be required C2. Elevations – Zones A1–A30, AE, AH, A (with	n BFE), VE, V1–V30, V (v	with BFE), AR, AR/A, AR		
Complete Items C2.a–h below according to Benchmark Utilized: private		atum: <u>NAVD88</u>	to Rico only, e	
Indicate elevation datum used for the elevati	ons in items a) through h	) below.		ter en de la companya de la company Na companya de la comp
🗌 NGVD 1929 🔀 NAVD 1988 🗌				
Datum used for building elevations must be t	he same as that used for	r the BFE.	Check th	e measurement used.
a) Top of bottom floor (including basement,	crawlspace. or enclosure	e floor)		eet meters
b) Top of the next higher floor			18.2 🗙 f	eet 🗍 meters
	momber (1/ Zapas anly)			eet
<ul><li>c) Bottom of the lowest horizontal structural</li><li>d) Attached garage (top of slab)</li></ul>	member (v zones only)	and the same of th		eet 🗌 meters
<ul> <li>e) Lowest elevation of machinery or equipm (Describe type of equipment and location)</li> </ul>	ent servicing the building	]		eet 🗌 meters
			7.9 🗙 f	eet 🗌 meters
f) Lowest adjacent (finished) grade next to		<sup>1</sup>	7.9 🗙 f	
g) Highest adjacent (finished) grade next to			<u></u>	
<ul> <li>h) Lowest adjacent grade at lowest elevatio structural support</li> </ul>	n of deck or stairs, includ	ling	<u>N/A</u> X f	eet 🗌 meters
SECTION D - SURV	EYOR, ENGINEER, OI	R ARCHITECT CERTIF	ICATION	
This certification is to be signed and sealed by a I certify that the information on this Certificate rep statement may be punishable by fine or imprison	presents my best efforts t	o interpret the data avail	by law to certify lable. I underst	elevation information. and that any false
Were latitude and longitude in Section A provided			X Check	k here if attachments.
Certifier's Name Paul M. Koelling, PLS, CFM	License Numbe NJ24GS 04328			
Title Professional Land Surveyor				Place
Company Name Paul Koelling & Associates NJ C.O.A. 24GA2825	6300			Seal
Address 2161 Shore Road PKsur	vey1@comcast.net			Here
City Linwood	State New Jersey	ZIP Code 08221		
Signature	5-15-23	Telephone (609) 927-0279	Ext.	
Copy all pages of this Elevation Certificate and all a	ttachments for (1) commu	unity official, (2) insurance	e agent/compan	y, and (3) building owner.
Comments (including type of equipment and loca *A8b.) Smart Vents Model #1540-520 engineered				
***C2a.) enclosure with garage, storage, entry, st	airs (elev 9.1)elevator	pit (elev 8.2)		
****C2e.) furnace (elev 14.6)water heater (elev	v 13.8)pool equipmen	t (elev 18.2)		

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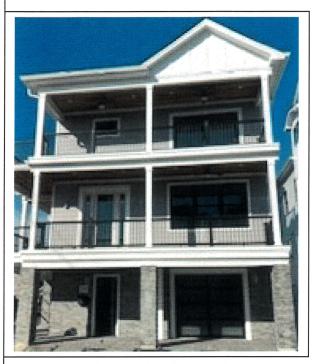
ELEVATION CERTIFICA	TE			OMB No. 1660 Expiration Date	-0008 e: November 30, :	2022
IMPORTANT: In these spaces,				FOR INSURA	NCE COMPANY	
Building Street Address (includin #100 North Sumner Avenue	g Apt., Unit, Suite, a	nd/or Bldg. No.) o	r P.O. Route and Box No	Policy Number		
City City of Margate		State New Jersey	ZIP Code 08402	Company NAI	C Number	
SECTIO	N E – BUILDING E FOR ZOI	LEVATION INFO	DRMATION (SURVEY N NE A (WITHOUT BFE)	OT REQUIRED)		
For Zones AO and A (without BF complete Sections A, B,and C. F enter meters.	E), complete Items E or Items E1–E4, use	1–E5. If the Certinn natural grade, if a	ficate is intended to supp available. Check the mea	ort a LOMA or LOM surement used. In P	R-F request, uerto Rico only,	
<ul><li>E1. Provide elevation informatio the highest adjacent grade ( a) Top of bottom floor (inclu</li></ul>	HAG) and the lowes	d check the appro t adjacent grade (I	ppriate boxes to show whe LAG).	ether the elevation is	s above or below	
crawlspace, or enclosure b) Top of bottom floor (inclu	e) is		feet [] m	neters 🔲 above o	r 🗌 below the H	IAG.
crawlspace, or enclosure	e) is			eters 🔲 above o		
E2. For Building Diagrams 6–9 w the next higher floor (elevation the diagrams) of the building	on C2.b in	openings provide		<u> </u>	-2 of Instructions	
E3. Attached garage (top of slab	ı) is				below the H	
E4. Top of platform of machinery servicing the building is	/ and/or equipment		feet 🔲 m	eters 🔲 above o	below the H	AG.
E5. Zone AO only: If no flood de floodplain management ordi	pth number is availal nance? 🔲 Yes [	ole, is the top of th	he bottom floor elevated in own. The local official m	n accordance with th ust certify this inform	ne community's nation in Section	G.
SECTION	F - PROPERTY OV	NER (OR OWNE	R'S REPRESENTATIVE			
The property owner or owner's au community-issued BFE) or Zone Property Owner or Owner's Author	AO must sign here.	The statements in	s Sections A, B, and E fo Sections A, B, and E are	r Zone A (without a correct to the best	FEMA-issued or of my knowledge.	•
Address			City	State	ZIP Code	
Signature			Date	Telephone		
Comments			· · · · · · · · · · · · · · · · · · ·			
an an an Araba an Araba an Araba. Marabana Marabana an Araba an Araba						
						1. A.
						·
				Check	nere if attachmen	nts.

ELEVATION CERTIFICATE			OMB No. 1660-0008 Expiration Date: November 30, 2022		
IMPORTANT: In these spaces, copy the corre	esponding information	from Section A.	FOR INSURANCE COMPANY USE		
Building Street Address (including Apt., Unit, Su #100 North Sumner Avenue	uite, and/or Bldg. No.) o	r P.O. Route and Box N	o. Policy Number:		
City City of Margate	State New Jersey	ZIP Code 08402	Company NAIC Number		
SECTIO	ON G - COMMUNITY IN	FORMATION (OPTION	IAL)		
The local official who is authorized by law or or Sections A, B, C (or E), and G of this Elevation used in Items G8–G10. In Puerto Rico only, en	Certificate. Complete th	e community's floodpla ne applicable item(s) an	in management ordinance can complete d sign below. Check the measurement		
G1. The information in Section C was taken engineer, or architect who is authoriz data in the Comments area below.)	engineer, or architect who is authorized by law to certify elevation information. (Indicate the source and date of the elevation				
G2. A community official completed Secti or Zone AO.	on E for a building locat	ed in Zone A (without a	FEMA-issued or community-issued BFE)		
G3. The following information (Items G4–	G10) is provided for cor	nmunity floodplain man	agement purposes.		
G4. Permit Number	G5. Date Permit Issue	ed	G6. Date Certificate of Compliance/Occupancy Issued		
G7. This permit has been issued for:	New Construction	Substantial Improveme	nt		
G8. Elevation of as-built lowest floor (including of the building:	g basement)		] feet 🔲 meters Datum		
G9. BFE or (in Zone AO) depth of flooding at t	the building site:	[	] feet 🔲 meters Datum		
G10. Community's design flood elevation:	-		] feet 🗌 meters Datum		
Local Official's Name	a Calate	Title	a Fan		
Community Name	on Calate	Telephone	609 - 522 - 1974		
Signature		Date	5/12/23		
Comments (including type of equipment and loc	cation, per C2(e), if appli	icable)			
			Check here if attachments.		

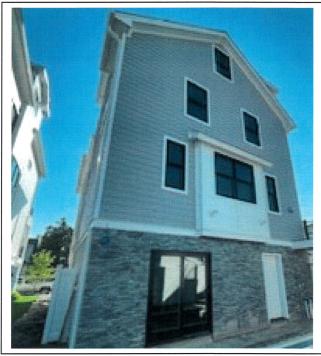
# **Building Photographs**

	See Instructions for Item A6.				
Building Street Address #100 N. Sumner	Policy Number				
City Margate	State NJ	ZIP Code <b>08402</b>	Company NAIC Number		

If using the Elevation Certificate to obtain NFIP flood insurance, affix at least two building photographs below according to the instructions for Item A6. Identify all photographs with: date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." If submitting more photographs than will fit on this page, use the Continuation Page on the reverse.



Front View - Date of Photograph: (05-15-2023)



Rear View – Date of Photograph: (05-15-2023)





Vent View - Date of Photograph: (05-15-2023)

Left Side View – Date of Photograph: (05-15-2023)



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# ESR-2074

**ICC-ES Evaluation Report** 

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#### Reissued 02/2021 Revised 04/2021 This report is subject to renewal 02/2023.

DIVISION: 08 00 00—OPENINGS SECTION: 08 95 43—VENTS/FOUNDATION FLOOD VENTS

**REPORT HOLDER:** 

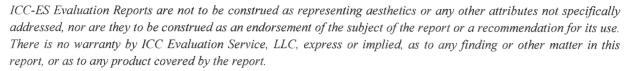
## SMART VENT PRODUCTS, INC.

**EVALUATION SUBJECT:** 

# SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: MODELS #1540-520; #1540-521; #1540-510; #1540-511; #1540-570; #1540-574; #1540-524; #1540-514 FLOOD VENT SEALING KIT #1540-526



"2014 Recipient of Prestigious Western States Seismic Policy Council (WSSPC) Award in Excellence"



ACCRIEDITED ISO/IEC 17065 Product Certification Body 41000

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## **ICC-ES Evaluation Report**

**ESR-2074** Reissued February 2021 Revised April 2021 This report is subject to renewal February 2023.

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DIVISION: 08 00 00—OPENINGS Section: 08 95 43—Vents/Foundation Flood Vents

#### **REPORT HOLDER:**

SMART VENT PRODUCTS, INC.

#### **EVALUATION SUBJECT:**

SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: MODELS #1540-520; #1540-521; #1540-510; #1540-511; #1540-570; #1540-574; #1540-524; #1540-514 FLOOD VENT SEALING KIT #1540-526

#### **1.0 EVALUATION SCOPE**

#### Compliance with the following codes:

- 2021, 2018, 2015, 2012, 2009 and 2006 International Building Code<sup>®</sup> (IBC)
- 2021, 2018, 2015, 2012, 2009 and 2006 International Residential Code<sup>®</sup> (IRC)
- 2021, 2018 International Energy Conservation Code<sup>®</sup> (IECC)
- 2013 Abu Dhabi International Building Code (ADIBC)<sup>†</sup>

 $^{\dagger}\text{The ADIBC}$  is based on the 2009 IBC. 2009 IBC code sections referenced in this report are the same sections in the ADIBC.

#### Properties evaluated:

- Physical operation
- Water flow
- 2.0 USES

The Smart Vent<sup>®</sup> units are engineered mechanically operated flood vents (FVs) employed to equalize hydrostatic pressure on walls of enclosures subject to rising or falling flood waters. Certain models also allow natural ventilation.

#### 3.0 DESCRIPTION

#### 3.1 General:

When subjected to rising water, the Smart Vent<sup>®</sup> FVs internal floats are activated, then pivot open to allow flow in either direction to equalize water level and hydrostatic pressure from one side of the foundation to the other. The FV pivoting door is normally held in the closed position by a buoyant release device. When subjected to rising water, the buoyant release device causes the unit to unlatch, allowing the door to rotate out of the way and allow flow. The water level stabilizes, equalizing the lateral forces. Each unit is

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fabricated from stainless steel. Smart Vent<sup>®</sup> Automatic Foundation Flood Vents are available in various models and sizes as described in Table 1. The SmartVENT<sup>®</sup> Stacking Model #1540-511 and FloodVENT<sup>®</sup> Stacking Model #1540-521 units each contain two vertically arranged openings per unit.

#### 3.2 Engineered Opening:

The FVs comply with the design principle noted in Section 2.7.2.2 and Section 2.7.3 of ASCE/SEI 24-14 [Section 2.6.2.2 of ASCE/SEI 24-05 (2012, 2009, 2006 IBC and IRC)] for a maximum rate of rise and fall of 5.0 feet per hour (0.423 mm/s). In order to comply with the engineered opening requirement of ASCE/SEI 24, Smart Vent FVs must be installed in accordance with Section 4.0.

#### 3.3 Ventilation:

The SmartVENT<sup>®</sup> Model #1540-510 and SmartVENT<sup>®</sup> Overhead Door Model #1540-514 both have screen covers with <sup>1</sup>/<sub>4</sub>-inch-by-<sup>1</sup>/<sub>4</sub>-inch (6.35 by 6.35 mm) openings, yielding 51 square inches (32 903 mm<sup>2</sup>) of net free area to supply natural ventilation. The SmartVENT<sup>®</sup> Stacking Model #1540-511 consists of two Model #1540-510 units in one assembly, and provides 102 square inches (65 806 mm<sup>2</sup>) of net free area to supply natural ventilation. Other FVs described in this report do not offer natural ventilation.

#### 3.4 Flood Vent Sealing Kit:

The Flood Vent Sealing Kit Model #1540-526 is used with SmartVENT<sup>®</sup> Model #1540-520. It is a Homasote 440 Sound Barrier<sup>®</sup> (ESR-1374) insert with 21 - 2-inch-by-2-inch (51 mm x 51 mm) squares cut in it. See Figure 4.

#### 4.0 DESIGN AND INSTALLATION

#### 4.1 SmartVENT<sup>®</sup> and FloodVENT<sup>®</sup>:

SmartVENT<sup>®</sup> and FloodVENT<sup>®</sup> are designed to be installed into walls or overhead doors of existing or new construction from the exterior side. Installation of the vents must be in accordance with the manufacturer's instructions, the applicable code and this report. Installation clips allow mounting in masonry and concrete walls of any thickness. In order to comply with the engineered opening design principle noted in Section 2.7.2.2 and 2.7.3 of ASCE/SEI 24-14 [Section 2.6.2.2 of ASCE/SEI 24-05 (2012, 2009, 2006 IBC and IRC)], the Smart Vent<sup>®</sup> FVs must be installed as follows:

With a minimum of two openings on different sides of each enclosed area.

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- With a minimum of one FV for every 200 square feet (18.6 m<sup>2</sup>) of enclosed area, except that the SmartVENT<sup>®</sup> Stacking Model #1540-511 and FloodVENT<sup>®</sup> Stacking Model #1540-521 must be installed with a minimum of one FV for every 400 square feet (37.2 m<sup>2</sup>) of enclosed area.
- Below the base flood elevation.
- With the bottom of the FV located a maximum of 12 inches (305.4 mm) above the higher of the final grade or floor and finished exterior grade immediately under each opening.

#### 4.2 Flood Vent Sealing Kit

The Flood Vent Sealing Kit Model 1540-526 is used in conjunction with FloodVENT<sup>®</sup> Model #1540-520. When installed and tested in accordance with ASTM E283, the FV and Flood Vent Sealing Kit assembly have an air leakage rate of less than 0.2 cubic feet per minute per lineal foot (18.56 l/min per lineal meter) at a pressure differential of 1 pound per square foot (50 Pa) based on 12.58 lineal feet (3.8 lineal meters) contained by the Flood Vent Sealing Kit.

#### 5.0 CONDITIONS OF USE

The Smart Vent<sup>®</sup> FVs described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

5.1 The Smart Vent<sup>®</sup> FVs must be installed in accordance with this report, the applicable code and the manufacturer's installation instructions. In the event of a conflict, the instructions in this report govern. **5.2** The Smart Vent<sup>®</sup> FVs must not be used in the place of "breakaway walls" in coastal high hazard areas, but are permitted for use in conjunction with breakaway walls in other areas.

#### 6.0 EVIDENCE SUBMITTED

- **6.1** Data in accordance with the ICC-ES Acceptance Criteria for Mechanically Operated Flood Vents (AC364), dated August 2015 (editorially revised February 2021).
- **6.2** Test report on air infiltration in accordance with ASTM E283.

#### 7.0 IDENTIFICATION

- 7.1 The Smart VENT<sup>®</sup> models and the Flood Vent Sealing Kit described in this report must be identified by a label bearing the manufacturer's name (Smartvent Products, Inc.), the model number, and the evaluation report number (ESR-2074).
- 7.2 The report holder's contact information is the following:

SMART VENT PRODUCTS, INC. 430 ANDBRO DRIVE, UNIT 1 PITMAN, NEW JERSEY 08071 (877) 441-8368 www.smartvent.com info@smartvent.com

MODEL NAME	MODEL NUMBER	MODEL SIZE (in.)	COVERAGE (sq. ft.)		
FloodVENT®	1540-520	15 <sup>3</sup> /4" X 7 <sup>3</sup> /4"	200		
SmartVENT®	1540-510	15 <sup>3</sup> / <sub>4</sub> " X 7 <sup>3</sup> / <sub>4</sub> "	200		
FloodVENT <sup>®</sup> Overhead Door	1540-524	15 <sup>3</sup> /4" X 7 <sup>3</sup> /4"	200		
SmartVENT <sup>®</sup> Overhead Door	1540-514	15 <sup>3</sup> /4" X 7 <sup>3</sup> /4"	200		
Wood Wall FloodVENT®	1540-570	14" X 8 <sup>3</sup> /4"	200		
Wood Wall FloodVENT® Overhead Door	1540-574	14" X 8 <sup>3</sup> /4"	200		
SmartVENT <sup>®</sup> Stacker	1540-511	16" X 16"	400		
FloodVent <sup>®</sup> Stacker	1540-521	16" X 16"	400		

TABLE 1-MODEL SIZES

For SI: 1 inch = 25.4 mm; 1 square foot =  $m^2$ 

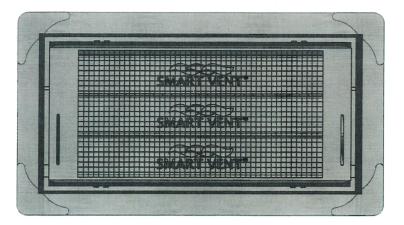


FIGURE 1-SMART VENT: MODEL 1540-510

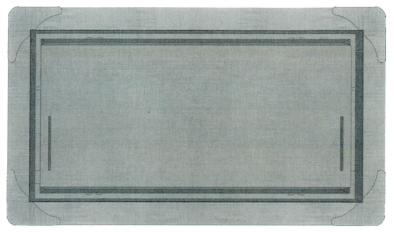


FIGURE 2-SMART VENT MODEL 1540-520

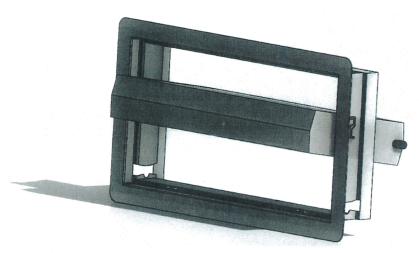


FIGURE 3-SMART VENT: SHOWN WITH FLOOD DOOR PIVOTED OPEN

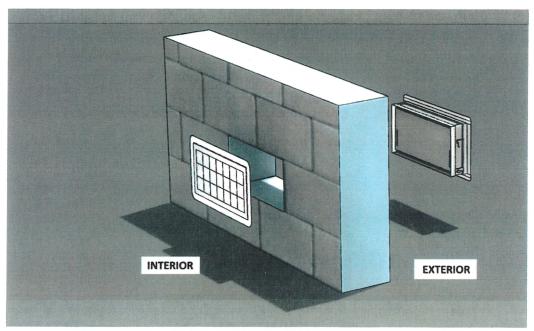


FIGURE 4-FLOOD VENT SEALING KIT