Viking WarmRoof / WarmSpan

Important Distinction:

'Warm roof' is a generic term for a roof insulating a building by installing rigid foam panels on the outside (on top) of the substrate. Warm roof can be installed on a new substrate or retrofitted to an existing one; both of which have been deemed as structurally compliant by qualified professionals.

<u>'WarmSpan'</u> is Viking's brand name for our engineer-certified, structural warm roof where the whole assembly including substrate has been tested and deemed codecompliant.

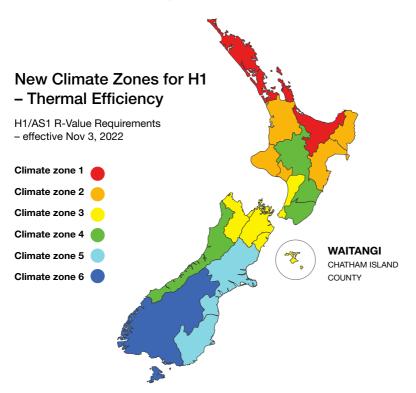
There are two versions of WarmSpan:

- "WarmSpan1" (since 2013) uses glass-facer insulation panels which are adhered to the vapour barrier and/or metal tray substrate (ST900; ST7; or Metcom7) with Flexible F.A.S.T. Adhesive.
- 'WarmSpan²' uses a 135mm single-layer of high-R-value foil-faced PIR insulation board covered with a 6.4mm coverboard which has been adhered to the foil facer of the PIR board. The insulation board is mechanically-fastened using insulated plugs to one of the engineer-tested substrate options being (i) any of the metal substrates listed above with supports as wide as 1800mm, or (ii) 17mm tongue and groove plywood with supports as wide as 900mm centres.

(NB: The waterproofing membrane options for both WarmSpan systems include Viking Enviroclad TPO or Viking Torch-on – fully **adhered** to the surface – not mechanically fastened).



Viking WarmRoof / WarmSpan



All residential roofs and other buildings up to 300m ²									
Climate zone 1									
R 6.6	R 6.6	R 6.6	R 6.6	R 6.6	R 6.6				

	Commercial Roofs over 300m ²								
Climate zone 1	Climate zone 2	Climate zone 3	Climate zone 4	Climate zone 5	Climate zone 6				
R 3.5	R 4.0	R 5.0	R 5.4	R 6.0	R 7.0				

Viking WarmRoof / WarmSpan

Membrane Choice for WarmRoof / WarmSpan

The following membrane systems are appropriate to be installed on a WarmRoof / WarmSpan roof:

Viking Enviroclad: 1.52mm

Viking Torch-On: 2 layers

	Adhesive / Primer/ Fastener Compatibility Matrix for Viking Warm Roof / WarmSpan Options									
Product Code	Description	Torch- on to cover board	Torch- on to glass facer PIR	Enviroclad to cover board	Enviroclad to glass facer PIR	Cover Board to glass facer PIR	Cover Board to foil facer PIR	Glass facer PIR to vapour barrier	Foil facer PIR to vapour barrier (mech. fastened only)	Vapour barrier to substrate
SES299	Solvent based torch- on primer	✓	✓	*	*	×	×	×	×	×
STP000	Sure Weld Adhesive	×	×	✓	✓	×	×	×	×	×
STP904	Cav Grip III	×	×	✓	✓	×	×	×	×	×
STP900b	Dual Cartridge Flexible F.A.S.T.	×	×	×	×	✓	×	✓	×	×
STP900d	Soudal Single pack polyurethane	*	×	×	×	✓	✓	✓	×	×
SES301	Vapour barrier primer	×	×	×	*	×	×	×	×	✓
	plates or Insulated plugs and screws	×	×	×	×	×	×	✓	✓	√



Viking WarmRoof

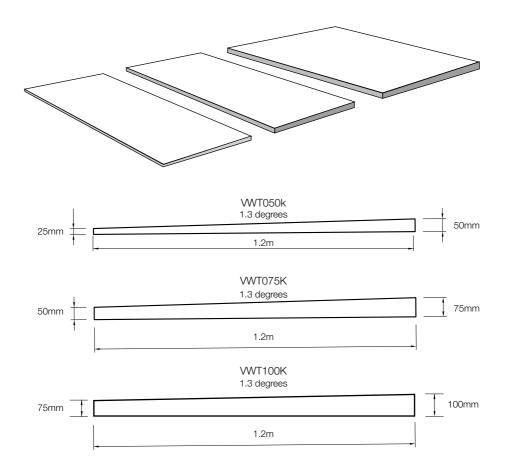


	Polyiso Sheets-Glass Facer***										
Product Code	Description	Thickness	Size **	Long Term* R- Value	Origin						
VWR025B	Polyiso	25mm	1.20m x 2.27m	0.95	England						
VWR050	Polyiso	50mm	1.20m x 2.27m	1.85	England						
VWR075	Polyiso	75mm	1.20m x 2.27m	2.75	England						
VWR100A	Polyiso	100mm	1.20m x 2.40m	3.80	England						

- *Average R-Value over 15 year period
- **Sheet lengths may vary. Check with Customer Services first
- ***can be adhered or mechanically fastened to the substrate and can be used with or without coverboard

Polysio Sheets Foil-Facer*									
Product Code Description Thickness Size ** Long Term* Orig									
VWR085F	Polysio	85mm	1.2m x 2.40m	4.14	NZ				
VWR135F	Polysio	135mm	1.2m x 2.40m	6.57	NZ				
*Must be mechanically	footoned and u	and with a Cov	or Board						

*Must be mechanically fastened and used with a Cover Board



	Tapered Polyiso Sheets - Glass Facer										
Product Code	Description	Thickness	Slope	R – Value	Long term* Size	Origin					
VWT050k	Tapered Polyiso	50mm – 25mm	1.3°	R 1.38	1.2m x 1.2m	England					
VWT075K	Tapered Polyiso	75mm – 50mm	1.3°	R 2.30	1.2m x 1.2m	England					
VWT100K	Tapered Polysio	100mm – 75mm	1.3°	R 3.38	1.2m x 1.2m	England					
VW2DEG Tapered Polyiso 75mm – 25mm 2.3°* R 1.83 1.2m x 1.2m USA (paper facer)											
- *VW2DEG = fe	- *VW2DEG = for single ply membranes only – unless Cover Board is used										





		Cover Boards						
Product Code	Description	Dimensions	Weight	Long term R Value	Origin			
VWR113	Viking Cover Board (as used in details)	6.4mm x 1.22m x 2.44m	5.9kg/m ²	0.049	USA			
VWR112	Secure Rock	10mm x 1.22m x 2.285m	9.5kg/m ²	0.076	USA			
- Both board	- Both board types can be used for Torch-On and single-ply membranes (except Dec-K-ing)							





SES301

Vapour Barrier and Primer									
Product Code	Description	Size	Est. Coverage**	Weight	M ³	Origin			
SES301	Vapour Barrier Primer Solvent Based*	19L	80m²/pail**	20kg	0.03	USA			
VWR725a	Vapour Barrier*	1.0m x 30.4m		28kg	0.07	USA			
- Refer Viking Product Data Sheet Vapour Barrier VWR725a for installation guidance									





Insulated Drains								
Product Code A B C Origin								
SDM022	135mm	300mm	100mm	NZ				
SDM023	135mm	300mm	80mm	NZ				



	Fasteners, Plates and Plugs								
Product Code	Description	Size	Origin						
VWR001	Ply / steel tray Fasteners	50mm length	USA						
VWR002	Ply / steel tray Fasteners	76mm length	USA						
VWR003	Ply / steel tray Fasteners	100mm length	USA						
VWR005	Rhino Plates*	80mm dia	USA						
VWR006	Polyiso Plates**	76mm dia	USA						
VWR007	Concrete Fasteners	50mm length	USA						
VWR008	Concrete Fasteners	76mm length	USA						
VWR009	Concrete Fasteners	100mm length	USA						
STP225	Insulated Plug**	65mm length	UK						
STP227	Insulated Plug**	105mm length	UK						

- *For Rhinobond installations only
- **Number of plates or insulation plugs per sheet will depend upon wind pressure requirements













Caulking Gun, F.A.S.T Adhesive and Accessories								
Product Code	Description	Origin						
STP900B	Flexible F.A.S.T. Adhesive Dual Cartridge (1.5litre/set (750ml A+B) (Coverage 7-10m2 / cartridge). Allow 1 set per 3 sheets of PIR Polyiso or Cover Board	USA						
STP911	Dual Cartridge Manual Caulking Gun (Long) for F.A.S.T.	USA						
STP912	Dual Cartridge Manual Caulking Gun (Short) for F.A.S.T.	USA						
STP900d	Single Pack Spray Adhesive 750ml. Allow 1 set per 2 sheets of PIR Polyiso or Cover Board	UK						
STP900d1	Click and fix foam gun for STP900d	UK						
STP900e	Cleaner for click and fix foam gun	UK						

Viking WarmSpan¹

(Any queries regarding compliance of the Viking WarmSpan¹ system can be answered in its corresponding Holmes Solutions Engineering report. Contact your Territory Manager or ph 0800 729 799 for more info)

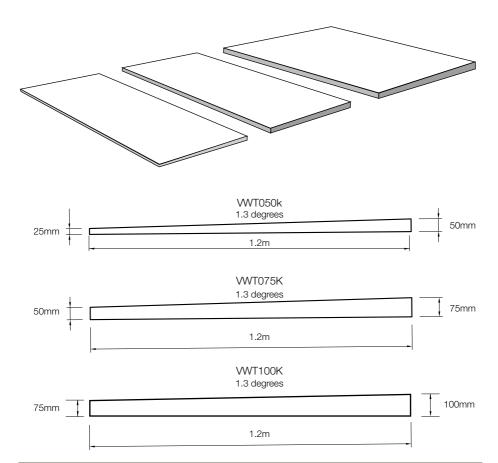


Viking WarmSpan¹



	Polyiso Sheets - Glass Facer										
Product Code	Description	Thickness	Size **	Long Term* R- Value	Origin						
VWR025B	Polyiso	25mm	1.20m x 2.27m	0.95	England						
VWR050	Polyiso	50mm	1.20m x 2.27m	1.85	England						
VWR075	Polyiso	75mm	1.20m x 2.27m	2.75	England						
VWR100A	Polyiso	100mm	1.20m x 2.40m	3.80	England						

- *Average R-Value over 15 year period
- **Sheet lengths may vary. Check with Customer Services first
- ***Must be adhered to the substrate with Flexible F.A.S.T. Adhesive (WarmSpan¹ is not a mechanically fastened system) but it can be used with or without Cover Board (adhered with a Viking polyurethane foam adhesive)
- NB: Foil facer insulation doesn't apply to WarmSpan¹



	Tapered Polyiso Sheets - Glass Facer							
Product Code	Description	Thickness	Slope	R – Value	Long term* Size	Origin		
VWT050k	Tapered Polyiso	50mm – 25mm	1.3°	R 1.38	1.2m x 1.2m	England		
VWT075K	Tapered Polyiso	75mm – 50mm	1.3°	R 2.30	1.2m x 1.2m	England		
VWT100K	Tapered Polysio	100mm – 75mm	1.3°	R 3.38	1.2m x 1.2m	England		
VW2DEG *	Tapered Polyiso (paper facer)	75mm – 25mm	2.3°*	R 1.83	1.2m x 1.2m	USA		
- *VW2DEG ca	- *VW2DEG can not be used with torch-on membranes unless a cover board is used							



Viking WarmSpan¹ Accessories





SES301

Vapour Barrier and Primer							
Product Code	Description	Size	Est. Coverage**	Weight	M ³	Origin	
SES301	Vapour Barrier Primer Solvent Based*	19L	80m²/pail**	20kg	0.03	USA	
VWR725a	Vapour Barrier*	1.0m x 30.4m		28kg	0.07	USA	
- Refer Viking Product Data Sheet Vapour Barrier VWR725a for installation guidance							



Insulated Drains						
Product Code	Α	В	С	Origin		
SDM022	135mm	300mm	100mm	NZ		
SDM023	135mm	300mm	80mm	NZ		













Caulking Gun, F.A.S.T Adhesive and Accessories					
Product Code	Description	Origin			
STP900B	Flexible F.A.S.T. Adhesive Dual Cartridge (1.5litre/set (750ml A+B) (Coverage 7-10m2 / cartridge). Allow 1 set per 3 sheets of PIR Polyiso or Cover Board	USA			
STP911	Dual Cartridge Manual Caulking Gun (Long) for F.A.S.T.	USA			
STP912	Dual Cartridge Manual Caulking Gun (Short) for F.A.S.T.	USA			
STP900d	Single Pack Spray Adhesive 750ml. Allow 1 set per 2 sheets of PIR Polyiso or Cover Board	UK			
STP900d1	Click and fix foam gun for STP900d	UK			
STP900e	Cleaner for click and fix foam gun	UK			



	Viking WarmSpan¹						
Product Code	Description	Size	Origin				
VWS100	Steel Deck Roof tray - Metcom 7, Steel & Tube ST7, or ST900	Order to the required length - contact Customer Services to discuss	NZ				
VWS110	Kiwi Mesh Safety Netting Galv. (Commercial Steel Roof Tray) 90m2	2.0mm x 1800mm x 50m	NZ				
VWS130**	Screws Unitite Hex Washer Head with Seal, 55mm** (box of 100)	55mm (12g)	China				
VWS131**	Screws, hex washer head with seals (Box of 500)	35mm long	China				
VWS140*	Viking Vapour Barrier Tape (3M) 152mm x 22.9m. SEALED DECK	152mm x 22.9m	USA				
VWS150b*	Industrial Silicone 600ml Sausage, Sheet Vapour Seal. SEALED DECK	300ml	Belgium				

Tape and silicone vapour barrier system can be used as an alternative to a full self adhered vapour sheet (for WarmSpan¹ only) for projects without mechanical fasteners. All mechanically fastened projects require full self adhered vapour barrier.



Viking WarmSpan²

(Any queries regarding compliance of the Viking WarmSpan² system can be answered in its corresponding Holmes Solutions Engineering report. Contact your Territory Manager or ph 0800 729 799 for more info)

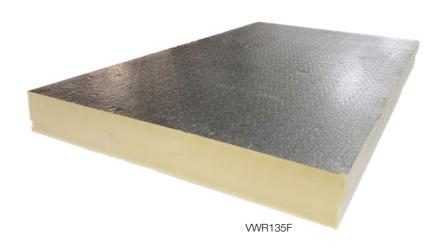
Viking WarmSpan²



Cover Board and Adhesive							
Product Code	D	escription	Dimensions	Weight	Long Term R-value		Origin
VWR113	Vil	king Cover Board	6.4mm x 1.22m x 2.44m	5.9kg/m ²	0.049	9	USA
Product Cod	Product Code Description					Origin	
			Spray Adhesive 750ml. Allow so or Cover Board	1 set per 2 s	heets		UK
STP900d1	STP900d1 Click and fix foam gun for STP900d					UK	
STP900e Cleaner for			click and fix foam gun				UK

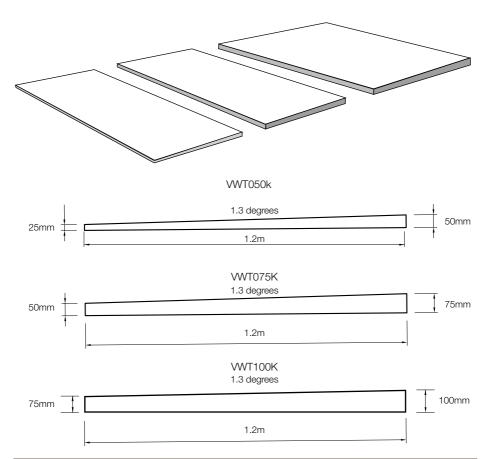


Viking WarmSpan²



Polyiso Sheets - Foil Facer*							
Product Description Thickness Size ** Long Term* Code R- Value							
VWR085F	Polysio	85mm	1.2m x 2.4m	4.14	NZ		
VWR135F	Polysio	135mm	1.2m x 2.4m	6.57	NZ		

⁻ Must be mechanically fastened before being overlaid with an adhered Viking Cover Board 6.4mm min. thick



Tapered Polyiso Sheets								
Product Code	Description	Thickness	Slope	R – Value	Long term* Size	Origin		
VWT050k	Tapered Polyiso	50mm – 25mm	1.3°	R 1.38	1.2m x 1.2m	England		
VWT075K	Tapered Polyiso	75mm – 50mm	1.3°	R 2.30	1.2m x 1.2m	England		
VWT100K	Tapered Polysio	100mm – 75mm	1.3°	R 3.38	1.2m x 1.2m	England		
VW2DEG	Tapered Polyiso (paper facer)	75mm – 25mm	2.3 **	R 1.83	1.2m x 1.2m	USA		

- For WarmSpan², these boards must be mechanically fastened and used under a Cover Board at all times





Fasteners and Plugs						
Product Code	Description	Size	Origin			
VWR001	Ply / steel tray Fasteners	50mm length	USA			
VWR002	Ply / steel tray Fasteners	76mm length	USA			
VWR003	Ply / steel tray Fasteners	100mm length	USA			
STP225	Insulated Plug**	65mm length	UK			
STP227	Insulated Plug**	105mm length	UK			





Vapour Barrier and Primer							
Product Code	Description	Size	Est. Coverage	Weight	M³	Origin	
SES301	Vapour Barrier Primer Solvent Based*	19L	80m²/pail	20kg	0.03	USA	
VWR725a	Vapour Barrier	1.0m x 30.4m		28kg	0.07	USA	

- Refer Viking Product Data Sheet Vapour Barrier VWR725a for installation guidance
- *Primer optional for WarmSpan2 seeing the vapour barrier is mechanically fastened





Insulated Drains						
Product Code A B C Origin						
SDM022	135mm	300mm	100mm	NZ		
SDM023	135mm	300mm	80mm	NZ		





VWS110

Viking WarmSpan ²						
Product Code	Description	Size	Origin			
VWS100	Steel Deck Roof tray - Metcom 7, Steel & Tube ST7, or ST900	Order to the required length - contact Customer Services to discuss	NZ			
VWS110	Kiwi Mesh Safety Netting Galv. (Commercial Steel Roof Tray) 90m2	2.0mm x 1800mm x 50m	NZ			
VWS130**	Screws Unitite Hex Washer Head with Seal, 55mm** (box of 100)	55mm (12g)	China			
VWS131**	Screws, hex washer head with seals (Box of 500)	35mm long	China			

⁻ NB: Tape and silicone vapour barrier system does not apply to WarmSpan²



Viking WarmSpan² Plywood

For WarmSpan², the minimum plywood substrate specification is 17mm H1.2 tongue and groove (seeing it is an interior component of the roof assembly). H1.2 treatment may be difficult to source, in which case H3.2 CCA treatment is an appropriate substitute.

NB: Plywood substrates are to be sourced from building supply merchants; Viking do not supply.



Viking Roof Garden



Drainage Board and Root Barrier for Enviroclad Roof Garden					
Product Code	Description	Size	Origin		
SRG001*	Roof Garden Drainage Board (also incorporates moisture retention mat and protection course)	1.2m wide	USA		
SRG002**	Roof Garden Root Barrier**	3.6m wide	USA		

- *To be used for Roof Gardens using Enviroclad 1.52mm (* Sold cut-to-length) or Garden FLL Torch-On
- NOTE: Electronic Leak Detection is highly recommended for all Roof Garden installations
- **SRG002 is required for Enviroclad only, as Torch-On General Garden FLL is Anti-Root



Viking Roof Garden

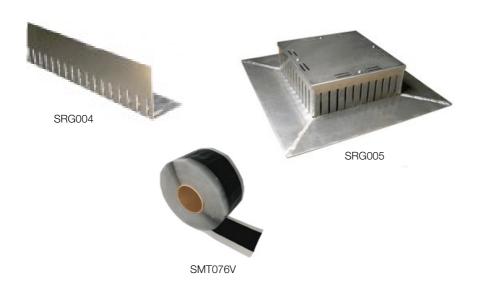


SEM630

General Garden FLL Anti-Root for Torch-On Roof Gardens								
Product Code	Description	Colour	Thickness	Width	Length	Weight	M ³	Origin
SEM630	General Garden FLL Anti-Root Torch-On	Black	4mm	1.0m	10m	50kg	0.06	Italy

- NOTE: SEM630 General Garden FLL Anti-Root Torch-On is to be used as a double-layer system
- Can be used with SEM330 Self-Adhered Base Sheet as first layer
- NOTE: Electronic Leak Detection is highly recommended for all Roof Garden installations

Viking Roof Garden Accessories



Edging and Drain Box					
Product Code	Description	Size	Origin		
SRG004a	Roof Garden Edging Alum	100mm H x 75mm W x 2400mm L*	USA		
SRG005	Roof Garden Alum Drain Box	Box = 100mm H x 300mm x 300mm Flange = 500mm x 500mm	USA		
SMT076V	Lap Tape	76mm W x 30.4m L	USA		

- To be used for Roof Garden only.
- *SRG004a 100mm height can be extended by riveting flat 2mm Alum. section to the top as required.
- SRG004 and SRG005 to be secured with SMT076V to Enviroclad pre-primed with SEC034 primer Refer details

