

Sika Canada Roofing Estimators Handbook Sarnafil® & Sikaplan® membranes

Introduction

Welcome to the Sika Canada Roofing Estimators Handbook. This guide is designed to serve as a quick reference for Estimators when considering a Sarnafil[®] or Sikaplan[®] project*.

Our Sales and Technical Services teams are here to support you in your efforts. Their phone number can be located on our website.

Sika Canada website <u>https://can.sika.com/en/construction/67113.html</u> which contains product data sheets (PDS), Safety data sheets (SDS), typical drawings and specifications that may be of assistance to you.

* Although accurate at the time of printing, we continuously endeavour to improve. Please check Sika Canada's website <u>https://can.sika.com/en/home.html</u> regularly to ensure you have the latest information.



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9. Typical Details



1. DESIGN REVIEW

Prior to bidding you can obtain a design review from Sika Canada for your project.

MANY MANUFACTURERS RESISTANCE DESIGN CRITERIA ARE BASED ON THE WIND SPEED OF THEIR WARRANTIES AND NOT THE CALCULATED WIND LOAD PRESSURES

Sika Canada technical department can provide upon request, Design Reviews for wind uplift, fire ratings and any other specific requested requirements which can assist you in your estimation of your Sika[®] Sarnafil[®] project.

Information Required for Design Review										
Building Address					Building /	Address: N	ANDATO	RY		
Building Length (ft.)					Enter the	Building \	Width in f	eet: MAND	DATORY	
Building Width (ft.)					Enter the	Building \	Width in f	eet: MANE	DATORY	
Roof Height (h) (ft.)					Enter the	Building \	Width in f	eet: MANE	DATORY	
Roof Slope (Degree)	Select				Select the	Roof Slo	pe:MAND	ATORY		
Importance Category	Select	See below for definition			Select the	e Importai	nce Catego	ory: OPTIO	NAL	
Building Openings	Select	See below for definition			Select the	e Building	Openings	: OPTIONA	AL.	
Roof Type/Shape	Select	See below for definition			Select the	Roof Typ	e/Shape:	MANDATO	ORY	
Structural Deck:	Select	If other please describe in ad	ditional information		Select the	Structura	al Deck: M	ANDATOR	Y	
Wind Load Compliance	Select				Select the	Wind Lo	ad Compli	ance: MAN	DATORY	
Fire Compliance	Select				Select the	Fire Com	pliance: N	ANDATO	RY	
Warranty Required	Select				Select the	Warrant	, Required	: MANDA	TORY	
Warranty Length (Years)	Select				Select the	Warrant	y Length: I	MANDATO	RY	
Wind or Hail Warranty Required (please specifiy)										
Proposed Specification:		· · · · · · · · · · · · · · · · · · ·								
Service TV Service Texaster Service Tex										

In accordance to the NBCC's Limit States design requirement, (NBCC - Subsections: 4.1.3 and 4.1.7) Wint foat calculation for roof covering and add-ons Building parameters Building parame	ROOF ZONE DEFINITION PER NBC:
Reference of the second	Consider 2 - since of 4 the Add right bar 10 kd by some holds the BOC MOD demains (RL) bet also the 1 kd fit. APPROVALS The roof assemblies noted above will meet FM Roof Nav assemblies and NBCICSA requirements for wind uplift as we as LLC Class A fire ratings. NOTES: 1. The National Building Code (NBC) defines the minimum requirements for wind load pressures and roof assess. These requirements are to be met to be in compliance with NBC. WARRANTY
Samafil Bhinobend Roof System: • Shell Dick • Samoaca, 10 vapour relarder lose laid with all laps sealed with <u>Situalsstomer</u> 65 tape. • Samafatom invalidor, top layer mechanically attached as disective boldow • 60 mil Samafil G410 fisching mentirane adhered with <u>Samaca</u> 2170 stitlesive Sita Cauda inc. 60 bitmar Amerus, Instee Cam, QC1994 449	The Samalit <u>Bitmotopid</u> root assembly described above will meet the requirements for a system warranty up to 20 years by Sike Cenada when installed according to current Sike Canada publiched specification, application and details.
Silar Canada Inc.	Sika Canada Inc.

Sarnafil[®] - Canada Roofing Estimators Handbook

Estimators Handbook

2. NOTICE OF AWARD

All Sika[®] Sarnafil[®] projects, regardless of warranty type must have a Notice of Award (NOA) submitted to the Sika Canada Technical department prior to the project commencement. This electronic form is the method used to track the project and ensure that the correct materials are used in your project.

Sarnafil[®]

Please note that Sika Canada will not release materials until a NOA has been received and processed.

ROOFING NOTICE OF AWARD (NOA)

Sarnafil* Adhered, Rhinobond, Rhinobond Metal Retrofit or Inseam/Sarnafast

ROOF	PLANS TO BE SUBN	MITTED V	WITH ALL NOAs			
I. PROJECT						
Project Name: Click here to enter tex	a.					
Roof Area 1 Name: Click here to ente	er text.					
Roof Area 2 Name: Click here to ente	er text.					
Roof Area 3 Name: Click here to ente	er text.					
Address: Click here to enter text.						
City: Click here to enter text.				Province: Select	P.C. Click here to enter text	
L BUILDING OWNER						
Name: Click here to enter text.						
Address: Click here to enter text.						
City: Click here to enter text.				Province: Select	P.C. Click here to enter text.	
Contact Person: Click here to enter to	ext	Tel: Clic	k here to enter text.	Email: Click	ere to enter text	
L DESIGNER / SPECIFIER		1100. 6000	A FRATE TO EFFET TEXE	Contract Contract		
Name: Click here to enter text						
Address: Click bere to enter text.						
City: Click have to enter text				Decidence: Select	P.C. Click here to enter text	
Contact Barrow Click bara to enter th	ext	Tak Clic	k here to enter text	Email: Click	ere to enter text	
	IAL	Tes. Cal	k here to enter text.	Email: CIOCI	ere to enter text.	
Name: Flick here to enter text						
Advisers: Click here to enter text.						
City Click here to enter text.				Decidence: Calact	D.C. Flick have to enter text	
City: Citk here to enter text.	NICATOR			Province: Select	P.C. Lick here to enter text.	
II. AUTHORIZED ROUFING APP	LICATOR					
Mame: Click here to enter text.						
Aboress: Click here to enter text.				Den (n. e. Falant	a c click have be achested	
City: Citk here to enter text. Province: Select P.C. Citk here to enter text.						
Contact Person: Click here to enter to	2xL	Tel: Clic	x here to enter text.	here to enter text. Email: Click here to enter text.		
Project Manager: Click here to enter	text.	Tel: Clic	x here to enter text.	Email: Click	iere to enter text.	
III. OTHER						
1. Building Usage: Select			Recycle Project:	Select		
3a. Roof Access: Select			3b. If "Other" spec	ify: Click here to	enter text.	
4a. Roof Membrane Overburden: Sel	ect 4b. If "Other" s	pecify: Cli	ck here to enter text	4c. Identify R	oof Area with Overburden: Click	
				here to enter	text.	
IV. PROJECT INFORMATION			_			
	Roof Area	1	Roof A	rea 2	Roof Area 3	
 Anticipated Start Date: 	Click here to enter a	date.	Click here to ent	er a date.	Click here to enter a date.	
Construction Type:	Select		Select		Select	
If Tear-Off specify	Select		Select		Select	
System:	Select		Select		Select	
4. Total Sqft. (include flashings):	Click here to enter to	ext.	Click here to enter text.		Click here to enter text.	
Warranty Type:	Select		Select		Select	
Warranty Length:	Select		Select		Select	
7. Special Warranty Request (Pre-	Click here to enter to	ext.				
approval required}						
8. Samafil Membrane:	Select		Select		Select	
i. Gauge:	Select		Select		Select	
ii. Colour:	Select		Select		Select	
iii. Flashing:	Select		Select		Select	
9. Sikaplan Membrane:	Select		Select		Select	
i. Gauge:	Select		Select		Select	
II. Colour:	Select		Select		Select	
ili, Flashing:	Select		Select		Select	
V. ADHERED ROOF SYSTEM						
1. Adhesive Type:	Select		Select		Select	
2 Coverage Rate:	Click berg to enter b	ext	Click berg to ent	er text	Click here to enter text	

• Contractor completes the NOA and submits the form electronically.

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• Project is reviewed by Sika Canada Technical services and the contractor is notified of any required changes

• Once accepted, the contractor is sent an Acceptance Notice of Award (ANOA) acceptance letter

• Upon completion of the project the contractor submits the request for Final Warranty

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BUILDING TRUST



3. SIKA® SARNAFIL® ROOFING SYSTEMS

MECHANICALLY-ATTACHED SYSTEMS

I. Sarnafast[®] / Inseam System

The Sarnafil[®] or Sikaplan[®] membrane is fastened in the seam overlap along one long side of the membrane directly into the roof deck. The adjacent membrane panels are then heat-welded together with an approved automatic hot air welder.

II. Engineered System

The Engineered System uses Sarnabar[®], a u-shaped steel bar that is fastened over Sarnafil[®] S327 membrane and into the roof deck, effectively clamping the membrane in place. The Sarnabar[®] is then covered with a strip of precut Sarnafil[®] S327 coverstrip membrane.

III. Rhinobond®

Rhinobond[®] system uses the Sarnadisc Rhinobond which is a polymer coated plate used with Sarnafasteners to attach the insulation or cover boards directly to the roof deck in a grid pattern. The roof membrane is then welded to the Sarnadisc Rhinobond by induction welding.

IV. Rhinobond[®] Metal Retrofit

Fasten the insulation to the purlins using the Sarnadisc Rhinobond and Sarnafasteners Fastener Retrodriller at the rates for the corresponding uplift approval. The insulation boards will need additional fastening to ensure a minimum of six (6) fasteners per 1,2 x 2,4 m (4' by 8') board. Sarnaplates & Sarnafastener #15 XP fastening components may be used for this fastening the board.

ADHERED SYSTEMS

I. Sarnafil[®] Adhered System

Sarnafil[®] Roofing membranes are adhered with Sarnacol[®] adhesives direct to approved substrates. Boards shall be secured to the roof deck by either fasteners and plates or insulation adhesive.

II. Sarnafil® Decor Adhered System

<u>Sarnafil®</u> Roofing membranes are adhered with Sarnacol® adhesives direct to approved substrates. Boards shall be secured to the roof deck by either fasteners and plates or insulation adhesive.

III. Adhered Sarnafil[®] SA System

Sarnafil[®] Roofing with a factory applied pressure-sensitive adhesive and siliconized polyethylene release liner membranes are adhered directly to approved substrates. Boards shall be secured to the roof deck by either fasteners and plates or insulation adhesive.



BALLASTED SYSTEMS

I. Stone/Paver Ballasted System

Sarnafil[®] membranes are loose laid and ballasted with either round washed river stones or pavers.

II. LightGUARD / HeavyGUARD PMR System

Sarnafil® membranes are loose laid beneath the insulation and ballasted LightGUARD / HeavyGUARD panels

III. Stone/Paver Ballasted PMR System

Sarnafil[®] membranes are loose laid beneath the insulation and ballasted with either round washed river stones, pavers or vegetative roof cover.

Sarnafil®



- 4. MECHANICALLY-ATTACHED SYSTEMS
- a. Rhinobond



	Cross Section Laver Rhinobond	Approved Materials
1.	Membrane	1.5, 1.8, or 2.0 mm (60, 72 or 80 mil) Sarnafil® S327 or 1.5 mm (60 mil) Sikaplan®
2.	Membrane & Board Securement	Sarnadisc Rhinobond or Sarnadisc Rhinobond Treadsafe
3.	Membrane & Board Securement	Sarnafastener #15 XP (Steel & Wood Decks), Sarnafastener #14 (Concrete &
	Fasteners	Wood Decks)
4.	Cover board (optional)	12 mm (½ in) Sarnatherm Roof Board A-III, 6, 12 & 15 mm (¼ in, ½ in & 5/8 in)
		DensDeck [®] & DensDeck [®] Prime
5.	Grounding Layer (optional not shown)	EFVM (Electronic Field Vector Mapping) Grid
6.	Insulation	Sarnatherm (137 or 172 kPa (20 psi or 25 psi)) flat & tapered, Sarnatherm CG (137 or 172 kPa (20 psi or 25 psi)) flat & tapered or Rockwool DD (note: cover board is required with Rockwool DD or Sarnadisc Rhinobond Treadsafe)
7.	Vapour Retarder	Sarnavap®-6, Sarnavap®-10, Vapor Retarder SA 31, Vapor Retarder SA 106, Vapor Retarder TA 138
8.	Vapour Retarder Primers (not shown)	Vapor Retarder Primer SB, Vapor Retarder Primer VC, Vapor Retarder Primer
		WB. Note: primers are not required for Sarnavap [®] 6 or 10)
9.	Thermal Barrier (optional not shown):	12 & 15 mm (½ in & 5/8 in) DensDeck [®] & DensDeck [®] Prime
10.	Structural Deck	22 Ga Steel, 50 mm (2 in) Wood Plank, 19 mm (¾ in) Plywood, 20,684 kPa (3000 psi) Concrete

Notes:

- Securement at Membrane Transition: Sikaplan® Disc, Sarnadisc Rhinobond, Sarnastop or Sarnabar
- Install Sika pressure sensitive Aluminum Tape as a barrier between the Sika® Sarnafil® membrane and Air /Vapour Barriers or other non-compatible surfaces
- A continuous air seal is required at perimeter edge for example refer to Section 10 Parapet Wall with Metal Cap

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- Board & Membrane securement rates are based on wind load pressures in the field, perimeter, and corner roof zones. Refer to Section 9b Roof System Attachment Guide or consult Sika Canada Technical Services for a Design Review
- Refer to Section 9a Roof Zone Guide to define the Field, Perimeter and Corner roof zones
- Refer to Section 9c Mechanical Attachment Rhinobond Guide
- <u>Refer to Section 10</u> for typical standard details



The top layer of the insulation is to be soldered rather than staggered as with other systems. The top layer is offset from the bottom layer.

Warranty Types:

- 1. Membrane: membrane material only warranty
- 2. Standard: workmanship & material warranty for membrane and accessories
- 3. System: workmanship & material warranty for all components

Warranty Duration:

- 1. Membrane: 5, 10, 15, 20, 25* or 30* years
- 2. Standard: 5, 10, 15, 20, 25** or 30** years
- 3. System: 5, 10, 15, 20, 25* or 30* years

- System warranties require all materials be supplied by Sika from the structural deck up
- Standard warranties require all materials for membrane/insulation fixation/adhesion to be supplied by Sika
- *Sarnavap 6 is not permitted in 25 & 30-year warranties
- *Coverboard is required for all 25 & 30-year warranties and PV roof systems
- *Sarnatherm CG or Rockwool insulation required for all 25 & 30-year warranties
- *Minimum 1.8 mm (72 mil) Sarnafil[®] S327 roof membrane and 1.5 mm (60 mil) G410 flashings required for 25year warranties
- *Minimum 2.0 mm (80 mil) Sarnafil[®] S327 roof membrane and 1.5 mm (60 mil) G410 flashings for 30-year warranties
- ** Contact your Sales Representative for specific requirements
- All high-speed wind and hail warranties must be pre-approved by the Sika Canada Vice President Technical
- Refer to Section 9h warranty selection guide



b. Rhinobond Metal Retrofit



Cross Section Layer Rhinobond Metal Retrofit		Approved Materials
1.	Membrane	1.5, 1.8 or 2.0 mm (60, 72 or 80 mil) Sarnafil [®] S327 or 1.5 mm (60 mil)
		Sikaplan®
2.	Membrane Securement	Sarnadisc Rhinobond
3.	Membrane Securement Fasteners	Fastener Retrodriller
4.	Board Securement	Sarnaplate
5.	Board Securement Fasteners	Sarnafastener #15 XP
6.	Cover board (optional)	12 mm (½ in) Sarnatherm Roof Board A-III, 6, 12 & 15 mm (¼ in, ½ in &
		5/8 in) DensDeck & DensDeck Prime
7.	Grounding Layer (optional not shown)	EFVM (Electronic Field Vector Mapping) Grid
8.	Insulation	Sarnatherm (137 or 172 kPa (20 psi or 25 psi)) flat & tapered, Sarnatherm
		CG (137 or 172 kPa (20 psi or 25 psi)) flat & tapered
9.	Structural Deck	Min. 26 Ga Steel



Notes:

- Securement at Membrane Transition: Sikaplan® Disc, Sarnadisc Rhinobond, Sarnastop or Sarnabar
- Install Sika pressure sensitive Aluminum Tape as a barrier between the Sika® Sarnafil® membrane and Air /Vapour Barriers or other non-compatible surfaces
- A continuous air seal is required at perimeter edge for example refer to Section 10 Parapet Wall with Metal Cap
- Board & Membrane securement rates are based on wind load pressures and purlin spacing in the field, perimeter and corner roof zones. Consult Sika Canada Technical Services for a Design Review
- Refer to Section 9a Roof Zone Guide to define the Field, Perimeter and Corner roof zones
- <u>Refer to Section 10</u> for typical standard details

Warranty Types:

- 1. Membrane: membrane material only warranty
- 2. Standard: workmanship & material warranty for membrane and accessories
- 3. System: workmanship & material warranty for all components

Warranty Duration:

- 1. Membrane: 5, 10, 15, 20, 25* or 30* years
- 2. Standard: 5, 10, 15, 20, 25** or 30**
- 3. System: 5, 10, 15, 20, 25* or 30* years

- System warranties require all materials be supplied by Sika from the structural deck up
- Standard warranties require all materials for membrane/insulation fixation/adhesion to be supplied by Sika
- *Sarnavap 6 is not permitted in 25 & 30-year warranties
- *Coverboard is required for all 25 & 30-year warranties and PV roof systems
- *Sarnatherm CG or Rockwool insulation required for all 25 & 30-year warranties
- *Minimum 1.8 mm (72 mil) Sarnafil[®] S327 roof membrane and 1.5 mm (60 mil) G410 flashings required for 25year warranties
- *Minimum 2.0 mm (80 mil) Sarnafil[®] S327 roof membrane and 1.5 mm (60 mil) G410 flashings required for 30year warranties
- ** Contact your Sales Representative for specific requirements
- All high-speed wind and hail warranties must be pre-approved by the Sika Canada Vice President Technical
- Refer to section 9h warranty selection guide



c. Sarnafast / Inseam



Cr	oss Section Layer Sarnafast / Inseam	Approved Materials
1)	Membrane	1.5, 1.8 or 2.0 mm (60, 72 or 80 mil) Sarnafil [®] S327 (Feltback), 1.5 mm (60 mil)
		Sikaplan®(Feltback)
2)	Membrane Securement	Sikaplan [®] Disc
3)	Membrane Securement Fasteners	Sarnafastener #15 XP (Steel & Wood Decks), Sarnafastener #14 (Concrete &
- 1		Wood Decks)
4)	Board Securement	Sarnaplate
5)	Board Securement Fasteners	Sarnafastener #15 XP (Steel & Wood Decks), Sarnafastener #14 (Concrete & Wood Decks), Sarnafastener #12 (Steel & Wood Decks)
6)	Cover board (optional)	12 mm ($^{\prime\prime}_{2}$ in) Sarnatherm $^{ extsf{B}}$ Roof Board A-III, 6, 12 & 15 mm ($^{\prime\prime}_{4}$ in, $^{\prime\prime}_{2}$ in & 5/8 in)
		DensDeck [®] & DensDeck Prime
7)	Grounding Layer (optional not shown)	EFVM (Electronic Field Vector Mapping) Grid
8)	Insulation	Sarnatherm [®] (137 or 172 kPa (20 psi or 25 psi)) flat & tapered, Sarnatherm [®]
		CG (137 or 172 kPa (20 psi or 25 psi)) flat & tapered or Rockwool DD (note: cover board is required with Rockwool DD).
9)	Vapour Retarder	Sarnavap 6, Sarnavap 10, Vapor Retarder SA 31, Vapor Retarder SA 106, Vapor Retarder TA 138
10)	Vapour Retarder Primers (not shown)	Vapor Retarder Primer SB, Vapor Retarder Primer VC, Vapor Retarder Primer WB. Note: primers are not required for Sarnavap 6 or 10)
11)	Thermal Barrier (optional not shown)	6 & 15 mm (½ in & 5/8 in) DensDeck [®] & DensDeck Prime
12)	Structural Deck	22 Ga Steel, 50 mm (2 in) Wood Plank, 19 mm (¾ in) Plywood, 20,684 kPa (3000 psi) Concrete



Notes:

- Securement at Membrane Transition: Sikaplan® Disc or Sarnabar
- Install Sika pressure sensitive Aluminum Tape as a barrier between the Sika® Sarnafil® membrane and Air /Vapour Barriers or other non-compatible surfaces
- A continuous air seal is required at perimeter edge for example refer to Section 10 Parapet Wall with Metal Cap
- Board & Membrane securement rates are based on wind load pressures in the field, perimeter, and corner roof zones. Refer to Section 9b Roof System Attachment Guide or consult Sika Canada Technical Services for a Design Review
- Refer to Section 9a Roof Zone Guide to define the Field, Perimeter and Corner roof zones
- <u>Refer to Section 9d</u> Board Attachment Guide
- <u>Refer to Section 10</u> for typical standard details

Warranty Types:

- 1. Membrane: membrane material only warranty
- 2. Standard: workmanship & material warranty for membrane and accessories
- 3. System: workmanship & material warranty for all components

Warranty Duration:

- 1. Membrane: 5, 10, 15, 20, 25^{* or} 30^{*} years
- 2. Standard: 5, 10, 15, 20, 25** or 30** years
- 3. System: 5, 10, 15, 20, 25^{*} or 30^{*} years

- System warranties require all materials to be supplied by Sika Canada from the structural deck up
- Standard warranties require all materials for membrane/insulation fixation/adhesion to be supplied by Sika
- *Sarnavap®-6 is not permitted in 25- & 30-year warranties
- *Coverboard is required for all 25 & 30-year warranties and PV roof systems
- *Sarnatherm CG or Rockwool insulation required for all 25 & 30-year warranties
- *Minimum 1.8 mm (72 mil) Sarnafil[®] S327 roof membrane and 1,4 mm (60 mil) G410 flashings required for 25year warranties
- *Minimum 2.0 mm (80 mil) Sarnafil[®] S327 roof membrane and 1.5 mm (60 mil) G410 flashings required for 30year warranties
- ** Contact your Sales Representative for specific requirements
- All high-speed wind and hail warranties must be pre-approved by the Sika Canada Vice President Technical
- <u>Refer to Section 9h</u> warranty selection guide

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Typical Sarnafast / Inseam System Details





DIRECTION OF STEEL DECK



NOTE:

1) MINIMUM PERIMETER DETERMINED BY THE NATIONAL BUILDING CODE OF CANADA CALCULATIONS. 2) A MINIMUM OF 2 PERIMETER HALF SHEETS MUST BE USED. 3) INTERMEDIATE FASTENER ROWS TO BE INSTALLED MIDWAY BETWEEN THE FASTENER ROWS.





NOTE:

 CORNER AREAS WHERE THE PERIMETER SHEETS INTERSECT, ADD ROWS OF FASTENERS AND DISCS OVER TOP OF THE MEMBRANE AND WELD A COVER TRIP.

CORNER & PERIMETER 10 FT SHEET LAYOUT APPROVED DECKS (NON STEEL)

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	Cross Section Layer Engineered	Approved Materials
1.	Membrane	1.5, 1.8 or 2.0 mm (60, 72 or 80 mil) Sarnafil [®] - S327 (Feltback) or 1.5 mm (60 mil) Sikaplan [®]
2.	Membrane Securement	Sarnabar
3.	Membrane Securement Fasteners	Sarnafastener #15 XP (Steel & Wood Decks), Sarnafastener #14 (Concrete & Wood Decks)
4.	Board Securement	Sarnaplate
5.	Board Securement Fasteners	Sarnafastener #15 XP (Steel & Wood Decks), Sarnafastener #14 (Concrete & Wood Decks), Sarnafastener #12 (Steel & Wood Decks)
6.	Cover board (optional)	12 mm (½ in) Sarnatherm Roof Board A-III, 6, 12 & 15 mm (¼ in, ½ in & 5/8 in) DensDeck & DensDeck Prime
7.	Grounding Layer (optional not shown)	EFVM (Electronic Field Vector Mapping) Grid
8.	Insulation	Sarnatherm (20 psi or 25 psi)) flat & tapered, Sarnatherm CG (20 psi or 25 psi)) flat & tapered or Rockwool DD (note: cover board is required with
		Rockwool DD).
9.	Vapour Retarder	Sarnavap [®] -6, Sarnavap [®] -10, Vapor Retarder SA 31, Vapor Retarder SA 106, Vapor Retarder TA 138
10.	Vapour Retarder Primers (not shown)	Vapor Retarder Primer SB, Vapor Retarder Primer VC, Vapor Retarder Primer WB. Note: primers are not required for Sarnavap 6 or 10)
11.	Thermal Barrier (optional not shown)	12 & 15 mm (½ in & 5/8 in) DensDeck & DensDeck Prime
12.	Structural Deck	22 Ga Steel, 50 mm (2 in) Wood Plank, 19 mm (¾ in) Plywood, 20,684 kPa (3000 psi) Concrete



Notes:

- Securement at Membrane Transition: Sarnabar®
- Install Sika pressure sensitive Aluminum Tape as a barrier between the Sika[®] Sarnafil[®] membrane and Air /Vapour Barriers or other non-compatible surfaces
- A continuous air seal is required at perimeter edge for example refer to Section 10 detail Parapet Wall with Metal Cap
- Board & Membrane securement rates are based on wind load pressures in the field, perimeter, and corner roof zones. Refer to Section 9b Roof System Attachment Guide or consult Sika Canada Technical Services for a Design Review
- Refer to Section 9a Roof Zone Guide to define the Field, Perimeter and Corner roof zones
- Refer to Section 9d Board Attachment Guide
- Refer to Section 10 for typical standard details

Warranty Types:

- 1. Membrane: membrane material only warranty
- 2. Standard: workmanship & material warranty for membrane and accessories
- 3. System: workmanship & material warranty for all components

Warranty Duration:

- 1. Membrane: 5, 10, 15, 20, 25^{*} or 30^{*} years
- 2. Standard: 5, 10, 15, 20, 25** or 30**years
- 3. System: 5, 10, 15, 20, 25^{*} or 30^{*} years

- System warranties require all materials be supplied by Sika from the structural deck up
- Standard warranties require all materials for membrane/insulation fixation/adhesion to be supplied by Sika
- *Sarnavap 6 is not permitted in 25 & 30-year warranties
- *Coverboard is required for all 25 & 30-year warranties and PV roof systems
- *Sarnatherm CG or Rockwool insulation required for all 25 & 30-year warranties
- *Minimum 1.8 mm (72 mil) Sarnafil[®] S327 roof membrane and 1.5 mm (60 mil) G410 flashings required for 25year warranties
- *Minimum 2.0 mm (80 mil) Sarnafil[®] S327 roof membrane and 1.5 mm (60 mil) G410 flashings required for 30year warranties
- ** Contact your Sales Representative for specific requirements
- All high-speed wind and hail warranties must be pre-approved by the Sika Canada Vice President Technical
- Refer to Section 9h warranty selection guide

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Typical Engineered System Details







INTERSECTION OF BAR AND COVER STRIP AT CORNER











NOTE: VAPOUR RETARDER SHALL BE SEALED AT EDGES





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5. **ADHERED SYSTEMS**

a. Adhered



	Cross Section Layer Adhered	Approved Materials
1.	Membrane	1.5, 1.8 or 2.0 mm (60, 72 or 80 mil) Sarnafil G410 (Feltback), 1.5 mm (60 mil) Sikaplan® (Feltback)
2.	Membrane Securement	Sarnacol [®] -2170 R, Sarnacol [®] VC, Sarnacol [®] -2121 or Sarnacol [®] Feltback Membrane Adhesive
3.	Board Securement, Mechanical	Sarnaplate
4.	Board Securement, Mechanical Fasteners	Sarnafastener #15 XP (Steel & Wood Decks), Sarnafastener #14 (Concrete & Wood Decks), Sarnafastener #12 (Steel & Wood Decks)
5.	Board Securement, adhesive (not shown)	Sarnacol [®] LRA, Sarnacol [®] -2163 or Sarnacol [®] OM Board Adhesive
6.	Cover board (optional)	12 mm (½ in) Sarnatherm Roof Board A-III, 6, 12 & 15 mm (¼ in, ½ in & 5/8 in) DensDeck & DensDeck Prime
7.	Grounding Layer (optional not shown)	EFVM (Electronic Field Vector Mapping) Grid
8.	Insulation	Sarnatherm (132 or 172 kPa (20 psi or 25 psi)) flat & tapered, Sarnatherm CG (137 or 172 kPa (20 psi or 25 psi)) flat & tapered or Rockwool DD (note: cover board is required with Rockwool DD).
9.	Vapour Retarder (polyethylene)	Sarnavap [®] -6, Sarnavap [®] -10
10.	Vapour Retarder (modified bitumen)	Vapor Retarder SA 31, Vapor Retarder SA 106, Vapor Retarder TA 138
11.	Vapour Retarder Primers (not shown)	Vapor Retarder Primer SB, Vapor Retarder Primer VC, Vapor Retarder Primer WB. Note: primers are not required for Sarnavap 6 or 10
12.	Thermal Barrier (optional not shown)	12 & 15 mm (½ in & 5/8 in) DensDeck & DensDeck Prime
13.	Structural Deck	22 Ga Steel, 50 mm (2 in) Wood Plank, 19 mm (¾ in) Plywood, 20,684 kPa (3000 psi) Concrete



Notes:

- Securement at Membrane Transition: Sarnastop or Sarnabar®
- Board Securement, mechanical, anywhere from the thermal barrier to the cover board. All components after the mechanical securement (up to the membrane) are then secured with board adhesive
- Install Sika pressure sensitive Aluminum Tape as a barrier between the Sika[®] Sarnafil[®] membrane and Air /Vapour Barriers or other non-compatible surfaces
- A continuous air seal is required at perimeter edge for example refer to Section 10 Parapet Wall with Metal Cap
- Membrane securement rates are based on membrane and adhesive. Refer to Section 9e Adhesive Selection Guide.
- Board & Membrane securement rates are based on wind load pressures in the field, perimeter, and corner roof zones. Refer to Section 9b Roof System Attachment Guide or consult Sika Canada Technical Services for a Design Review
- Refer to Section 9a Roof Zone Guide to define the Field, Perimeter and Corner roof zones
- Refer to Section 9d Board Attachment Guide
- Refer to Section 10 for typical standard details
- Board Adhesive cannot be used to adhere to Sarnavap[®]6 or Sarnavap[®]10
- Trayed vegetative roof cover may be installed over the membrane. Sarnafelt NWP separation layer is required between the membrane and the trayed vegetative roof system and a cover board is required. Consult Sika Canada Technical Services for warranty duration and conditions.

Warranty Types:

- 1. Membrane: membrane material only warranty
- 2. Standard: workmanship & material warranty for materials supplied by Sika
- 3. System: workmanship & material warranty

Warranty Duration:

- 1. Membrane: 5, 10, 15, 20, 25^{*} or 30^{*} years
- 2. Standard: 5, 10, 15, 20, 25** or 30** years
- 3. System: 5, 10, 15, 20, 25^{*} or 30^{*} years

Warranty Notes:

- System warranties require all new materials supplied by Sika from the structural deck up
- Standard warranties require all materials for membrane/insulation fixation/adhesion to be supplied by Sika Canada
- Sarnavap[®]-6 is not permitted in 25- & 30-year warranties
- Cover board is required for all 25- & 30-year warranties and PV roof systems
- Sarnatherm CG or Rockwool insulation required for all 25- & 30-year warranties
- Minimum 1.8 mm (72 mil) Sarnafil[®]G410 roof membrane and 1.5 mm (60 mil) G410 flashings required for 25year warranties
- Minimum 2.0 mm (80 mil) Sarnafil[®] G410 roof membrane and 1.5 mm (60 mil) G410 flashings required for 30year warranties
- ** Contact your Sales Representative for specific requirements
- Mechanical fixation is required, for one of the layers (overboard, insulation or thermal barrier) below the membrane, for all 25 and 30-year warranties which incorporate Steel, Wood Plank or Plywood structural deck
- All high-speed wind and hail warranties must be pre-approved by the Vice President Technical

Sarnafil[®] - Canada Roofing Estimators Handbook



- Refer to Section 9h warranty selection guide
- b. Sarnafil[®] Décor



	Cross Section Layer Sarnafil Décor	Approved Materials
1.	Membrane	1.5, 1.8 or 2.0 mm (60, 72 or 80 mil) Sarnafil G410 (Feltback)
2.	Membrane Securement	Sarnacol [®] -2170 R, Sarnacol [®] VC, Sarnacol [®] -2121 or Sarnacol [®] Feltback
		Membrane Adhesive
3.	Rib Profile	Décor Rib
4.	Board Securement Mechanical	Sarnaplate or Sarnaplate Low Profile
5.	Board Securement Mechanical Fasteners	Sarnafastener #15 XP (Steel & Wood Decks), Sarnafastener #14 (Concrete
		& Wood Decks), Sarnafastener #12 (Steel & Wood Decks)
6.	Board Securement Adhesive	Sarnacol [®] LRA, Sarnacol [®] -2163 or Sarnacol [®] OM Board Adhesive
7.	Cover board (optional)	12 mm (½ in) Sarnatherm Roof Board A-III, 6, 12 & 15 mm (¼ in, ½ in &
		5/8 in) DensDeck & DensDeck Prime
8.	Grounding Layer (optional not shown)	EFVM (Electronic Field Vector Mapping) Grid
9.	Insulation	Sarnatherm (137 or 172 kPa (20 psi or 25 psi)) flat & tapered, Sarnatherm
		CG (137 or 172 kPa (20 psi or 25 psi)) flat & tapered or Rockwool DD
		(note: cover board is required with Rockwool DD).
10.	Vapour Retarder (polyethylene)	Sarnavap 6, Sarnavap 10
11.	Vapour Retarder (modified bitumen)	Vapor Retarder SA 31, Vapor Retarder SA 106, Vapor Retarder TA 138
12.	Vapour Retarder Primers (not shown)	Vapor Retarder Primer SB, Vapor Retarder Primer VC, Vapor Retarder
		Primer WB. Note: primers are not required for Sarnavap [®] -6 or 10
13.	Thermal Barrier (optional not shown)	12 & 15 mm (½ in & 5/8 in) DensDeck & DensDeck Prime
14.	Structural Deck	22 Ga Steel, 50 mm (2 in) Wood Plank, 19 mm (¾ in) Plywood, 20,684 kPa
		(3000 psi) Concrete



Notes:

- Securement at Membrane Transition: Sarnastop or Sarnabar
- Board Securement, mechanical, anywhere from the thermal barrier to the cover board. All components after the mechanical securement (up to the membrane) are then secured with board adhesive
- Install Sika pressure sensitive Aluminum Tape as a barrier between the Sika® Sarnafil® membrane and Air /Vapour Barriers or other non-compatible surfaces
- A continuous air seal is required at perimeter edge for example refer to Section 10 Parapet Wall with Metal Cap
- Membrane securement rates are based on membrane and adhesive. Refer to Section 9e Adhesive Selection Guide.
- Board & Membrane securement rates are based on wind load pressures in the field, perimeter, and corner roof zones. Refer to Section 9b Roof System Attachment Guide or consult Sika Canada Technical Services for a Design Review
- <u>Refer to Section 9a</u> Roof Zone Guide to define the Field, Perimeter and Corner roof zones
- <u>Refer to Section 9d</u> Board Attachment Guide
- <u>Refer to Section 10</u> for typical standard details
- Board Adhesive cannot be used to adhere to Sarnavap[®]-6 or Sarnavap[®]-10

Warranty Types:

- 1. Membrane: membrane material only warranty
- 2. Standard: workmanship & material warranty for materials supplied by Sika Canada
- 3. System: workmanship & material warranty

Warranty Duration:

- 1. Membrane: 5, 10, 15 or 20 years
- 2. Standard: 5, 10, 15 or 20 years
- 3. System: 5, 10, 15 or 20 years

- System warranties require all new materials supplied by Sika from the structural deck up
- Standard warranties require all materials for membrane/insulation fixation/adhesion to be supplied by Sika Canada
- All high-speed wind and hail warranties must be pre-approved by the Vice President Technical
- <u>Refer to section 9h</u> warranty selection guide



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C	ross Section Layer Samafil SA (Self	Αμμιονοά ΜαλοιίαΙο
	Adhered)	
1.	Membrane	1.5, 1.8 or 2.0 mm (60, 72 or 80 mil) Sarnafil® G410 SA (Feltback)
2.	Board Securement Mechanical	Sarnaplate or Sarnaplate Low Profile
3.	Board Securement Mechanical	Sarnafastener #15 XP (Steel & Wood Decks), Sarnafastener #14 (Concrete &
	Fasteners	Wood Decks), Sarnafastener #12 (Steel & Wood Decks)
4.	Board Securement Adhesive (not	Sarnacol [®] LRA, Sarnacol [®] -2163 or Sarnacol [®] OM Board Adhesive
	shown)	
5.	Cover board (optional)	12 mm (½ in) Sarnatherm Roof Board A-III, 6, 12 & 15 mm (¼ in, ½ in & 5/8
		in) DensDeck & DensDeck Prime
6.	Grounding Layer (optional not	EFVM (Electronic Field Vector Mapping) Grid
	shown)	
7.	Insulation	Sarnatherm (137 or 172 kPa (20 psi or 25 psi)) flat & tapered, Sarnatherm
		CG (137 or 172 kPa (20 psi or 25 psi)) flat & tapered or Rockwool DD (note,
		cover board is required with Rockwool DD).
8.	Vapour Retarder (polyethylene)	Sarnavap [®] -6, Sarnavap [®] -10
9.	Vapour Retarder (modified bitumen)	Vapor Retarder SA 31, Vapor Retarder SA 106, Vapor Retarder TA 138
10.	Vapour Retarder Primers (not	Vapor Retarder Primer SB, Vapor Retarder Primer VC, Vapor Retarder
	shown)	Primer WB. Note: primers are not required for Sarnavap [®] 6 or 10
11.	Thermal Barrier (optional not shown)	12 & 15 mm (½ in & 5/8 in) DensDeck & DensDeck Prime
12.	Structural Deck	22 Ga Steel, 50 mm (2 in) Wood Plank, 19 mm (¾ in) Plywood, 20,684 kPa (3000 psi) Concrete

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Notes:

- Securement at Membrane Transition: Sarnastop or Sarnabar
- Board Securement, mechanical, anywhere from the thermal barrier to the cover board. All components after the mechanical securement (up to the membrane) are then secured with board adhesive
- Install Sika pressure sensitive Aluminum Tape as a barrier between the Sika[®] Sarnafil[®] membrane and Air /Vapour Barriers or other non-compatible surfaces
- A continuous air seal is required at perimeter edge for example refer to Section 10 Parapet Wall with Metal Cap
- Board & Membrane securement rates are based on wind load pressures in the field, perimeter, and corner roof zones. Refer to Section 9b Roof System Attachment Guide or consult Sika Canada Technical Services for a Design Review
- Refer to appendix Section 9a Roof Zone Guide to define the Field, Perimeter and Corner roof zones
- Refer to Section 9d Board Attachment Guide
- Refer to Section 10 for typical standard details
- Board Adhesive cannot be used to adhere to Sarnavap[®]-6 or Sarnavap[®]-10
- Trayed vegetative roof cover may be installed over the membrane. Sarnafelt NWP separation layer is required between the membrane and the trayed vegetative roof system and a cover board is required. Consult Sika Canada Technical Services for warranty duration and conditions.

Warranty Types:

- 1. Membrane: membrane material only warranty
- 2. Standard: workmanship & material warranty for materials supplied by Sika
- 3. System: workmanship & material warranty

Warranty Duration:

- 1. Membrane: 5, 10, 15, 20, 25^{*} or 30^{*} years
- 2. Standard: 5, 10, 15, 20, 25** or 30** years
- 3. System: 5, 10, 15, 20, 25^{*} or 30^{*} years

- System warranties require all new materials supplied by Sika from the structural deck up
- Standard warranties require all materials for membrane/insulation fixation/adhesion to be supplied by Sika Canada
- Sarnavap[®]-6 is not permitted in 25- & 30-year warranties
- Cover board is required for all 25- & 30-year warranties and PV roof systems
- Sarnatherm[®] CG or Rockwool insulation required for all 25- & 30-year warranties
- Minimum 1.8 mm (72 mil) Sarnafil[®] G410 roof membrane and 1.5 mm (60 mil) G410 flashings required for 25-year warranties
- Minimum 2.0 mm (80 mil) Sarnafil[®] G410 roof membrane and 1.5 mm (60 mil) G410 flashings required for 30-year warranties
- ** Contact your Sales Representative for specific requirements
- All high-speed wind and hail warranties must be pre-approved by the Vice President Technical
- Refer to Section 9h warranty selection guide

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6. BALLASTED SYSTEMS

a. Stone/Paver Ballasted



Cro	oss Section Layer Stone/Paver Ballasted	Approved Materials
1.	Ballast	Ballast shall be nominal 38 mm (1-1/2 in), smooth, clean, and well-rounded, river- bottom stone meeting ASTM D448 No. 4, minimum rate of 49 kg/m ² (10 lb/ft ²).
2.	Pavers & Pedestals (not shown)	Pavers shall be highly resistant to freeze/thaw cracking. Weight shall be at least 88 kg/m ² (18 lb/ft ²), Pedestals, minimum PAVE-EL 5x or Sika approved
3.	Protection Layer	Sarnafelt NWP
4.	Membrane	1.5, 1.8 or 2.0 mm (60, 72 or 80 mil) Sarnafil® G410 (Feltback), 1.5 mm (60 mil) Sikaplan®(Feltback)
5.	Cover board (optional)	12 mm (½ in) Sarnatherm Roof Board A-III, 6, 12 & 15 mm (¼ in, ½ in & 5/8 in) DensDeck & DensDeck Prime
6.	Grounding Layer (optional not shown)	EFVM (Electronic Field Vector Mapping) Grid
7.	Insulation	Sarnatherm (137 or 172 kPa (20 psi or 25 psi)) flat & tapered, Sarnatherm CG (137 or 172 kPa (20 psi or 25 psi)) flat & tapered or Rockwool DD (note: cover board is required with Rockwool DD).
8.	Vapour Retarder	Sarnavap®-6, Sarnavap®-10, Vapor Retarder SA 31, Vapor Retarder SA 106, Vapor Retarder TA 138
9.	Vapour Retarder Primers (not shown)	Vapor Retarder Primer SB, Vapor Retarder Primer VC, Vapor Retarder Primer WB. Note: primers are not required for Sarnavap 6 or 10
10.	Thermal Barrier (optional not shown)	12 & 15 mm (½ in & 5/8 in) DensDeck & DensDeck Prime
11.	Structural Deck	22 Ga Steel, 50 mm (2 in) Wood Plank, 19 mm (¾ in) Plywood, 20,684 kPa (3000 psi) Concrete



Notes:

- Securement at Membrane Transition: Sarnabar
- Install Sika pressure sensitive Aluminum Tape as a barrier between the Sika[®] Sarnafil[®] membrane and Air /Vapour Barriers or other non-compatible surfaces
- A continuous air seal is required at perimeter edge for example refer to Section 10 Parapet Wall with Metal Cap
- Ballast/Paver rates are based on ANSI/SPR RP-4 requirements or consult Sika Canada Technical Services for a Design Review
- <u>Refer to section 9a</u> Roof Zone Guide to define the Field, Perimeter and Corner roof zones
- <u>Refer to section 10 for typical standard details</u>

Warranty Types:

- 1. Membrane: membrane material only warranty
- 2. Standard: workmanship & material warranty for materials supplied by Sika
- 3. System: workmanship & material warranty

Warranty Duration - Sikaplan®:

- 1. Membrane: 5 or 10 years
- 2. Standard: 5 or 10 years
- 3. System: 5 or 10 years

Warranty Duration - Sarnafil®:

- 1. Membrane: 5, 10, 15 or 20 years
- 2. Standard: 5, 10, 15 or 20 years
- 3. System: 5, 10, 15 or 20 years

- System warranties require all new materials supplied by Sika from the structural deck up
- Min 1.8 mm (72 mil) Sarnafil[®] G410 required for 15-year warranties
- Minimum 2.0 mm (80 mil) Sarnafil[®] G410 required for 20-year warranties
- Refer to section 9h warranty selection guide



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b. LightGUARD/HeavyGUARD Ballasted PMR



	Cross Section Layer LightGUARD/HeavyGUARD Ballasted PMR	Approved Materials
1.	Ballast	LightGUARD / HeavyGUARD insulation
2.	Separation Layer	Sarnafelt NWP, Drainage Panel 990
3.	Membrane	1.5, 1.8 or 2.0 mm (60, 72 or 80 mil) Sarnafil® G410 (Feltback), or 1.5 mm (60 mil) Sikaplan® (Feltback)
4.	Grounding Layer (optional not shown)	EFVM (Electronic Field Vector Mapping) Grid. Sarnafelt NWP (HD) is required between the membrane and the grounding layer. The Sarnafelt NWP layer may be eliminated if Feltback membranes are used
5.	Thermal Barrier (required on steel decks)	12 & 15 mm (½ in & 5/8 in) DensDeck & DensDeck Prime
6.	Protection Layer (not shown) required on Wood Plank, Plywood and Concrete decks	Sarnafelt NWP HD. The Sarnafelt NWP protection layer may be eliminated if Feltback membranes are used
7.	Structural Deck	22 Ga Steel, 50 mm (2 in) Wood Plank, 19 mm (¾ in) Plywood, 20,684 kPa (3000 psi) Concrete



Notes:

- Securement at Membrane Transition: Sarnastop or Sarnabar
- Install Sika pressure sensitive Aluminum Tape as a barrier between the <u>Sika® Sarnafil®</u> membrane and Air /Vapour Barriers or other non-compatible surfaces
- A continuous air seal is required at perimeter edge for example refer to Section 10 Parapet Wall with Metal Cap
- Additional securement of the LightGUARD / Heavy GUARD insulation is required in perimeter and corner zones. Contact Sika Canada Technical Services for a Design Review
- Refer to Section 9a Roof Zone Guide to define the Field, Perimeter and Corner roof zones
- <u>Refer to Section 10</u> for typical standard details

Warranty Types:

- 1. Membrane: membrane material only warranty
- 2. Standard: workmanship & material warranty for materials supplied by Sika
- 3. System: workmanship & material warranty

Warranty Duration - Sikaplan®:

- 1. Membrane: 5 or 10 years
- 2. Standard: 5 or 10 years
- 3. System: 5 or 10 years

Warranty Duration - Sarnafil®:

- 1. Membrane: 5, 10, 15 or 20 years
- 2. Standard: 5, 10, 15 or 20 years
- 3. System: 5, 10, 15 or 20 years

- System warranties require all new materials supplied by Sika from the structural deck up
- Minimum 1.8 mm (72 mil) Sarnafil[®] G410 required for 15-year warranties
- Minimum 2.0 mm (80 mil) Sarnafil[®] G410 required for 20-year warranties
- <u>Refer to section 9h</u> warranty selection guide

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Cross Section Layer Ballasted		Approved Materials
	PMR	
1.	Ballast (not shown) in lieu of the	Ballast shall be nominal 38 mm (1-1/2 in), smooth, clean, and well-rounded, river-
	Pavers & Pedestals	bottom stone meeting ASTM D448 No. 4, minimum rate of 49 kg/m ² (10 lb/ft ²).
2.	Pavers & Pedestals	Pavers shall be highly resistant to freeze/thaw cracking. Weight shall be at least 88 kg/m ² (18 lb/ft ²). Pedestals, minimum PAVE-EL 5x or Sika approved
3.	Vegetative cover (not shown) in lieu of the Pavers & Pedestals	Intensive/Extensive vegetative roof system by others
4.	Protection Layer	Sarnafelt NWP
5.	Insulation	Closed cell extruded polystyrene foam insulation board, meeting ASTM C578 Type VI or VII, at least 137 kPa (20 psi) compressive strength
6.	Separation Layer	Sarnafelt NWP, Drainage Panel 990
7.	Membrane	1.5, 1.8 or 2.0 mm (60, 72 or 80 mil) Sarnafil® G410 (Feltback)or 1.5 mm (60 mil)
		Sikaplan [®] (Feltback)
8.	Grounding Layer (optional not	EFVM (Electronic Field Vector Mapping) Grid. Sarnafelt NWP (HD) is required
	shown)	between the membrane and the grounding layer. The Sarnafelt NWP layer may be eliminated if Feltback membranes are used
9.	Thermal Barrier (not shown) required on steel decks	12 & 15 mm (½ in & 5/8 in) DensDeck & DensDeck Prime
10.	Protection Layer (not shown)	Sarnafelt NWP HD. Protection layer may be eliminated if Feltback membranes
	required on Wood Plank,	are used.
	Plywood and Concrete decks	
11.	Structural Deck	22 Ga Steel, 50 mm (2 in) Wood Plank, 19 mm (¾ in) Plywood, 20,684 kPa (3000 psi) Concrete



Notes:

- Securement at Membrane Transition: Sarnabar or Sarnastop
- Install Sika pressure sensitive Aluminum Tape as a barrier between the Sika® Sarnafil® membrane and Air /Vapour Barriers or other non-compatible surfaces
- A continuous air seal is required at perimeter edge for example refer to Section 10 Parapet Wall with Metal Cap
- Ballast/Paver rates are based on ANSI/SPR RP-4 requirements or consult Sika Canada Technical Services for a Design Review
- Refer to Section 9a Roof Zone Guide to define the Field, Perimeter and Corner roof zones
- <u>Refer to Section 10</u> for typical standard details

Warranty Types:

- 1. Membrane: membrane material only warranty
- 2. Standard: workmanship & material warranty for materials supplied by Sika
- 3. System: workmanship & material warranty

Warranty Duration - Sikaplan®:

- 1. Membrane: 5 or 10 years
- 2. Standard: 5 or 10 years
- 3. System: 5 or 10 years

Warranty Duration - Sarnafil®:

- 1. Membrane: 5, 10, 15 or 20 years
- 2. Standard: 5, 10, 15 or 20 years
- 3. System: 5, 10, 15 or 20 years

- System warranties require all new materials supplied by Sika from the structural deck up
- Minimum 1.8 mm (72 mil) Sarnafil[®] G410 required for 15-year warranties
- Minimum 2.0 mm (80 mil) Sarnafil[®] G410 required for 20-year warranties
- <u>Refer to Section 9h</u> warranty selection guide

Sarnafil[®]



7. TYPICAL PRODUCTS

For a complete listing of all our available products, contact your local Sales Representative or refer to the price list. Refer to the PDS, specifications, application manuals, guides for additional product information and application information.

VAPOUR RETARDERS

Sarnavap®-6

Polyethylene vapour retarder for use within Sarnafil® and Sikaplan® insulated roof systems.

Sarnavap[®]-10

Polyethylene vapour retarder/air barrier for use within Sarnafil® and Sikaplan® insulated roof systems.

Vapor Retarder SA 31

0.8 mm (31 mil) thick self-adhesive vapour retarder/air barrier for use within Sarnafil[®] and Sikaplan[®] insulated roof systems. Vapor Retarder SA 31 can also serve as temporary roof protection in areas limited to light construction traffic. It can be left exposed for up to two (2) months.

Vapor Retarder SA 106

2.7 mm (106 mil) thick self-adhesive vapour retarder/air barrier for use within Sarnafil[®] and Sikaplan[®] insulated roof systems. Vapor Retarder SA 106 can also serve as temporary roof protection. It can be left exposed for up to six (6) months.

Vapor Retarder TA 138 (Torch Applied)

3.5 mm (138 mil) thick torch applied SBS modified bitumen polyester reinforced vapour retarder for use within Sarnafil[®] and Sikaplan[®] insulated roof systems. Vapor Retarder TA 138 can also serve as temporary roof protection. It can be left exposed for up to six (6) months.

INSULATION

Sarnatherm[®] ISO

Rigid closed cell polyisocyanurate insulation board with fibre reinforced felt facers and is suitable for use in new construction and re-roofing with Sarnafil[®] or Sikaplan[®] membranes. Sarnatherm[®] ISO is available as flat or tapered board. Sarnatherm[®] ISO is available with a compressive strength of 138 kPa (20 psi) or 172 kPa (25 psi).

Sarnatherm CG

Rigid closed cell polyisocyanurate insulation board with coated glass facers. Sarnatherm CG[®] is suitable for use in new construction and re-roofing with Sarnafil[®] or Sikaplan[®] membranes. Sarnatherm[®] CG is available with a compressive strength of 138 kPa (20 psi) or 172 kPa (25 psi).

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Notes:

- 1. When insulation is to be secured to the deck with fasteners and plates, the fastener must have 1 in (25.4 mm) penetration into the steel or plywood decks, and embedment into concrete or wood plank decks.
- 2. Use two (2) layers of insulation when total thickness of Sarnatherm[®] exceeds 69 mm (2.7 in). Stagger joints in both directions at least 300 mm (12 in) between layers.
- 3. When adhering Sarnatherm insulation use 1.20 m x 1. 20 m (4 ft x 4 ft) boards only.

BOARD ADHESIVES

Sarnacol[®]-2163 Board Adhesive

Two-component foamable polyurethane board adhesive that is applied in one step and sets up in minutes. Sarnacol[®]-2163 Board Adhesive is used to bond insulation and cover boards to approved substrates, vapour retarders and/or to intermediate insulation boards.

Sarnacol[®] LRA

Two-component foamable polyurethane board adhesive that is applied in one step and sets up in minutes. Sarnacol[®] LRA is used to bond insulation and cover boards to approved substrates, vapour retarders and/or to intermediate insulation boards.

Sarnacol® OM (WG) Board Adhesive

Two-component foamable polyurethane board adhesive that is applied in one step and sets up in minutes. Sarnacol[®] OM (WG) Board Adhesive is used to bond insulation and cover boards to approved substrates, vapour retarders and/or to intermediate insulation boards.

FASTENERS AND PLATES

Sarnaplate

Specially designed stress plate used with approved Sarnafasteners to attach Sarnatherm[®] insulation, Sarnatherm[®] roof boards, gypsum roof boards, or other Sika approved boards directly to the roof deck prior to the installation of the Sarnafil[®] or Sikaplan[®] mechanically-attached or adhered roof membrane.

Sarnaplate Low Profile

Specially designed stress plate used with approved Sarnafasteners to attach Sarnatherm[®] insulation, Sarnatherm[®] roof boards, gypsum roof boards, or other Sika approved boards directly to the roof deck prior to the installation of the Sarnafil[®] Décor Adhered roof membrane.

Sikaplan Disc

Round steel plate with eyehooks, used with Sarnafasteners fasteners to inseam attach Sarnafil[®] S327 or Sikaplan[®] Fastened membrane to approved roof decks. The eye hooks grip the membrane without initiating tears.

Sarnafil®



Sarnadisc Rhinobond

Specially designed polymer coated plates used with Sarnafasteners to attach Sarnatherm[®] insulation, Sarnatherm[®] roof boards, gypsum roof boards, or other Sika approved boards directly to the roof deck or structural purlins prior to the installation of Sarnafil[®] S327 or Sikaplan[®] Fastened membrane. The membrane is field welded to Sarnadisc Rhinobond by induction welding.

Sarnadisc Rhinobond Treadsafe

Fastening system consisting of a polymer tube used in conjunction with a specially designed polymer coated Sarnadisc Rhinobond Treadsafe to attach Sarnatherm[®] insulation, Sarnatherm[®] roof boards, or other Sika approved boards directly to the roof deck or structural purlins prior to the installation of the Sarnafil[®] S327 or Sikaplan[®] Fastened roof membrane. The membrane is field welded to the Sarnadisc Rhinobond Treadsafe by induction welding. It can also be used over non-compressible insulation to limit thermal bridging.

Sarnabar

Heavy-duty "U" shaped, roll formed steel bar specifically designed to resist the static and dynamic loads produced during strong winds. Sarnabar distributes the loads uniformly across a series of fastening points and maximizes pull-out and back-out resistance.

Sarnastop

Aluminum alloy bar used with approved fasteners to clamp Sarnafil[®] or Sikaplan[®] membrane to the roof deck, walls, curbs, and other details.

Sarnafastener #14

Threaded drill point fastener used within Sarnafil[®] roof systems to attach Sarnafil S327 Membrane or Sarnatherm[®] insulation, Sarnatherm roof boards, gypsum roof boards, or other Sika approved boards into structural concrete (63-68 kg/m² (140-150 lb/ft)), wood plank (minimum 38 mm (1-½ in)), or plywood sheathing (minimum 50 mm (2 in)).

Sarnafastener #15 XP

Threaded drill point fastener used within Sarnafil[®] roof systems to attach Sarnafil[®] S327 Membrane, Sikaplan Fastened Membrane or Sarnatherm[®] insulation, Sarnatherm[®] roof boards, gypsum roof boards, or other Sika approved boards into steel decking (18-24 gauge), wood planks (minimum 1-½ in), or plywood sheathing (minimum ½ in).

Sarnafastener #12

Threaded drill point fastener used within Sarnafil[®] or Sikaplan roof systems to attach Sarnatherm[®] insulation, Sarnatherm[®] roof boards, gypsum roof boards, or other Sika approved boards into steel decking (18-24 gauge), wood planks (minimum 1-½ in), or plywood sheathing (minimum ½ in).

Fastener Retrodriller
Estimators Handbook

Sarnafil®



BUILDING TRUST

CONSTRUIRE LA CONFIANCE

Threaded drill point fastener used to attach Sarnafil[®] S327 Membrane or Sikaplan[®] Fastened Membrane into structural steel purlins (12-16 gauge).



COVER BOARD / THERMAL BARRIER

Sarnatherm[®] Roof Board A-III

Rigid closed cell polyisocyanurate insulation board with coated glass facer which is suitable for use in new construction and re-roofing with Sarnafil[®] or Sikaplan[®] membranes. Sarnatherm[®] Roof Board A-III has a compressive strength of 551 kPa (80 psi).

DensDeck[®] Prime Roof Board

Thermal barrier and cover board used in Sarnafil[®] and Sikaplan[®] roof systems that has been enhanced to provide a broader compatibility and higher performance with Sarnafil[®] adhesives and self adhered vapour retarders.

DensDeck[®] Roof Board

Thermal barrier and cover board used in Sarnafil® and Sikaplan® roof systems.

MEMBRANE ADHESIVES

Sarnacol®-2170 R

Solvent-based, reactivating adhesive used for Sarnafil[®] or Sikaplan[®] Adhered roofing systems. Sarnacol[®]-2170 R can also be used within any Sika approved roofing system for adhering flashings. The adhesive is formulated for adhering membranes in a two-step process to clean, dry, surfaces with no slope restrictions.

Sarnacol®-2170 VC

Low VOC, solvent-based, reactivating adhesive used for Sarnafil[®] or Sikaplan[®] Adhered roofing systems. Sarnacol[®]-2170 VC Adhesive can also be used within any Sika approved roofing system for adhering flashings. The adhesive is formulated for adhering membranes in a two-step process to clean, dry, surfaces with no slope restrictions.

Sarnacol[®]-2121

Water-based, dispersion adhesive used for Sarnafil[®] or Sikaplan[®] Adhered roofing systems. Sarnacol[®]-2121 is formulated for adhering membranes as a wet lay in to clean, dry, water absorbent, horizontal roof surfaces with slopes up to 2/12 (10°).

Sarnacol® Feltback OM and AD Membrane Adhesive

Two components foamable polyurethane adhesives that is applied in one step and sets up in minutes. Sarnacol[®] AD and OM Feltback Membrane Adhesive is used to bond Sarnafil[®] and Sikaplan[®] Adhered Feltback membranes to approved substrates.



MEMBRANES

Actual performance proven in the field over time is the only true test of a roofing system's quality. Billions of square feet of Sika Sarnafil® membrane have performed with distinction **over the past 55+** years in climates of every description. Many installations are still performing after 30 years or more of service. Sarnafil® G and S membranes are available in a variety of guaranteed thicknesses (1.5, 1.8 and 2.0 mm (60, 72 and 80 mil)), and both standard and custom colours.

Sarnafil® Membranes

All Sarnafil[®] branded membranes are guaranteed to meet or exceed the labelled value thickness when tested according to ASTM D751, e.g. the thickness of 1.5 mm (60 mil) S or G membrane is 1.5 mm (60 mil) minimum.

Sarnafil® S327 EnergySmart Roof Membrane (available in Feltback, textured)

Min Thickness

PVC thermoplastic membrane produced with an integral polyester reinforcement for high strength, is highly reflective, with heat-weldable seams, and a unique lacquer coating applied to the top of the membrane to reduce dirt pick up. Sarnafil[®] S327 is a polyester reinforcement specifically designed for mechanically-attached systems, S327 is exceptional at resisting membrane tearing at the high point loads imposed on mechanically-attached roof systems.

Sarnafil® G410 EnergySmart Roof Membrane (available in Feltback, textured)

PVC thermoplastic membrane produced with an integral fibreglass mat reinforcement for excellent dimensional stability, with heat-weldable seams, and a unique lacquer coating applied to the top of the membrane to reduce dirt pick up. Sarnafil[®] G410 is specifically designed for adhered systems, they deliver exceptional dimensional stability for adhered roof systems

Sarnafil[®] G410 SA Roof and Flashing Membrane

PVC thermoplastic membrane with a factory applied pressure sensitive adhesive backing and siliconized polyethylene release liner. It is produced with an integral fibreglass mat reinforcement for excellent dimensional stability, is highly reflective, with heat-weldable seams, and a unique lacquer coating applied to the top of the membrane to reduce dirt pick up.

Sarnafil® G459

Membrane specially formulated for application by adherence directly to asphalt or other contaminated surfaces and for direct exposure to the weather. Sarnafil® G459 is heat-weldable and manufactured with an integral fibre glass mat reinforcement for dimensional stability. It can also be used as a flashing membrane within Sarnafil® and Sikaplan® roofing and systems. Sarnafil® G459 is also used in conjunction with Sikaflex®-11 FC or Sarnafiller adhesives to construct sub-membrane waterstops within the Sarnafil® grid PMR system.



Sikaplan® Membranes

All Sikaplan[®] branded membranes are a nominal thickness (<u>+</u> 10 %) of the labelled value thickness as defined in the ASTM Standard D4434.

Sikaplan® EnergySmart Roof Membrane (available in Feltback)

PVC thermoplastic membrane produced with a polyester scrim reinforcement.

ACCESSORIES

Aluminum Tape

Aluminum foil faced pressure sensitive taping, which allows for a separation barrier between contaminated/non-compatible materials and Sarnafil[®] or Sikaplan[®] membranes.

Sikalastomer-65

High-performance sealant tape with superior surface tack that remains elastic and is designed to bond to Sarnafil[®] or Sikaplan[®] membranes and a variety of metals

Sarnaclad

PVC-coated, heat-weldable sheet metal capable of being formed into a variety of shapes and profiles.

Sarnacircle

Sarnacircles are required on T joints welding membranes greater than 1.5mm (60 mil) thick or when using the Speed nozzle with a Speedweld setting on a Sarnamatic welder.

Prefabricated Detail Flashings

Sika[®] Sarnafil[®] has a large selection of prefabricated, standard flashings, inside corners, outside corners and custom flashings for your convenience. Please contact your local Sale Representative or see our website for a full range of products.

Samafil® CONSTRUIRE LA CONFIANCE

8. GUIDES

a. Roof Zone Guide



Calculation: Z = 10 % of the greater Building Plan (NOT ROOF) dimension (W)



Samafil[®] CONSTRUIRE LA CONFIANCE





Calculation: Z = Lessor of: 40 % of the Roof Height (h₁) or 10 % of the lessor Building Plan (NOT ROOF) dimension (W₁), but not less than 4 % of W₁

Samafil[®] CONSTRUIRE LA CONFIANCE



Note: Z is to be calculated separetly for Building A and Building B.

Building A, Calculation: Z = Lessor of: 40 % of the Roof Height (h) or 10 % of the lessor Building Plan (NOT ROOF) dimension (W₁), but not less than 4 % of W₁.



Calculation: Z = Lessor of: 40 % of the Roof Height (h) or 10 % of the lessor Building Plan (NOT ROOF) dimension (W_1), but not less than 4 % of W_1







Calculation: Z = Lessor of: 40 % of the Roof Height (h) or 10 % of the lessor Building Plan (NOT ROOF) dimension (W_1), but not less than 4 % of W_1





Calculation: Z = Lessor of: 40 % of the Roof Height (h) or 10 % of the lessor Building Plan (NOT ROOF) dimension (W₁), but not less than 4 % of W₁





Calculation: Z = Lessor of: 40 % of the Roof Height (h) or 10 % of the lessor Building Plan (NOT ROOF) dimension (W₁), but not less than 4 % of W₁

Jika

b. Roof System Attachment Guide

MECHANICALLY ATTACHED SYSTEMS										
System	Deck ³	Thermal Barrier⁴	Vapour Retarder	Insulation	Cover Board	Membrane	Field of Roof Pressure	Zones	Attachment	Wind Uplift Approvals
	Structural			Min 2" Sarnatherm		Sikaplan®		Field:	6 per 4' x 8' board	CSA A123.21
Rhinobond	Concrete, Steel,	Optional	Any Sika®(1,2)	(CG)	Optional ⁽⁵⁾	Sarnafil®	45 psf	Perimeter:	8 per 4' x 8' board	(specific test reports
	Wood Plank,			. ,		S327 ⁽⁶⁾		Corner:	14 per 4' x 8' board	available upon
	Structural			Min 2" Sarnatherm		Sikaplan®		Field:	8 per 4' x 8' board	CSA A123.21
Rhinobond	Concrete, Steel,	Optional	Any Sika®(1,2)	(CG)	Optional ⁽⁵⁾	or	60 psf	Perimeter:	12 per 4' x 8' board	(specific test reports
	Wood Plank,					Sarnafil®		Corner:	16 per 4' x 8' board	available upon
	Churchterral					Sikanlan®	45 psf	Field:	Sarnabar spaced 72° O.C. & fastened 12° O.C.	5NA 4470 (an a sifin
	Structural			Min 2" Sarnathorm		Sikapian [®]			Insulation/Cover Board Tastened 1 per 4 sqlt.	FIM 4470 (specific
Engineered	Wood Plank	Optional	Any Sika®(1,2)		Optional ⁽⁵⁾	C227 (6)		Perimeter:	January Cover Board fastened 1 per 4 saft	available upon
	Plywood			(CG)		3527 (0)			Sarnabar spaced 36" o. c. & fastened 12" o.c.	request)
	Fiywoou							Corner:	Insulation/Cover Board fastened 1 per 4 soft	requesty
									Sarnabar spaced 72" o.c. & fastened 6" o.c.	
Engineered Co V	Structural Concrete, Steel, Wood Plank, Plywood	el, Optional	Any Sika ^{⊛(1,2)}	Min 2" Sarnatherm (CG)	Optional ⁽⁵⁾	Sikaplan® or Sarnafil® S327 ⁽⁶⁾		Field:	Insulation/Cover Board fastened 1 per 4 soft.	FM 4470 (specific
									Sarnabar spaced 48" o.c. & fastened 6" o.c.	roof Nav assemblies
							60 pst	Perimeter:	Insulation/Cover Board fastened 1 per 4 sqft.	available upon
								Company	Sarnabar spaced 36" o.c. & fastened 6" o.c.	request)
								Corner:	Insulation/Cover Board fastened 1 per 4 sqft.	
	Structural Concrete, Steel, Wood Plank, Plawood	Optional	Any Sika®(1,2)	Min 2" Sarnatherm		Sikaplan® or Sarnafil® S327 ⁽⁶⁾		Field:	10' sheet: fastened 12" o.c. inseam	CSA A123.21 (specific test reports available upon
									Insulation/Cover Board fastened 1 per 4 sqft.	
								Perimeter:	5' sheet: fastened 12" o.c. inseam	
Sarnafast/Inseam					Optional ⁽⁵⁾		37.5psf		Insulation/Cover Board fastened 1 per 4 sqft.	
				(00)					Coverstrip (over fastener & plate attached 12"	
	i iyweed							Corner:	o.c.) between perimeter rows	requesty
									Insulation/Cover Board fastened 1 per 4 sqft.	
								Field:	10' sheet: fastened 6" o.c. inseam	
	Structural					Sikaplan®			Insulation/Cover Board fastened 1 per 4 sqft.	CSA A123.21
o (, /)	Concrete, Steel,			Min 2" Sarnatherm		or Sarnafil®	60 f	Perimeter:	5' sheet: fastened 6" o.c. inseam	(specific test reports
Sarnafast/Inseam	Wood Plank,	Optional	Any Sika ^{®(1,2)}	(CG)	Optional ⁽⁵⁾	S327 ⁽⁶⁾	60 pst		Insulation/Cover Board fastened 1 per 4 sqft.	available upon
	Plywood							Corror	Coverstrip (over fastener & plate attached 6" o.c.)	request)
								Corner:	Detween perimeter rows	
									6 56' sheet: fastened 18" o.c. inseam	
	Structural							Field:	Insulation/Cover Board fastened 1 per 4 soft	EM 4470 (specific
	Concrete Steel		Dptional Any Sika ^{®(1,2)}	Min 2" Sarnatherm		Sarnafil®			6.56' sheet: fastened 12" o.c. inseam	roof Nav assemblies
Sarnafast	Wood Plank.	Optional		(CG)	Optional ⁽⁵⁾	S327 ⁽⁶⁾	30 psf	Perimeter:	Insulation/Cover Board fastened 1 per 4 soft.	available upon
	Plywood			(00)					6.56' sheet: fastened 6" o.c. inseam	request)
		,						Corner:	Insulation/Cover Board fastened 1 per 4 sqft.	

Sarnafil[®] - Canada Roofing Estimators Handbook



ADHERED SYSTEMS										
System	Deck ³	Thermal Barrier⁴	Vapour Retarder	Insulation	Cover Board	Membrane	Field of Roof Pressure	Zones	Attachment	Wind Uplift Approvals
Adhered - PARS - Mandatory Thermal Barrier Attached	Steel, Wood Plank, Plywood	Minimum 1/2" DensDeck Prime	Vapour Retarder SA 31 or SA 106	Min 2" Sarnatherm (CG) - maximum board size is 4ft. X 4ft.	Optional ⁽⁵⁾	Sikaplan® or Sarnafil® G410 ^(6,7)	35 psf	Field: Perimeter: Corner:	Thermal Barrier fastened at 1 per 4 sqft Insulation/Cover Board adhered with Sarnacol Low Rise Board Adhesive @ 12" o.c. Thermal Barrier fastened at 1 per 2.67 sqft Insulation/Cover Board adhered with Sarnacol Low Rise Board Adhesive @ 6" o.c. Thermal Barrier fastened at 1 per 1.33 sqft Insulation/Cover Board adhered with Sarnacol Low Rise Board Adhesive @ 4" o.c.	CSA A123.21 (specific test reports available upon request)
Adhered - PARS - Mandatory Thermal Barrier Attached	Steel, Wood Plank, Plywood	Minimum 1/2" DensDeck Prime	Vapour Retarder SA 31 or SA 106	Min 2" Sarnatherm (CG) - maximum board size is 4ft. X 4ft.	Optional ⁽⁵⁾	Sikaplan® or Sarnafil® G410 ^(6,7)	50 psf	Field: Perimeter: Corner:	Thermal Barrier fastened at 1 per 2.67 sqft Insulation/Cover Board adhered with Sarnacol Low Rise Board Adhesive @ 12" o.c. Thermal Barrier fastened at 1 per 1.78 sqft Insulation/Cover Board adhered with Sarnacol Low Rise Board Adhesive @ 6" o.c. Thermal Barrier fastened at 1 per 1 sqft Insulation/Cover Board adhered with Sarnacol Low Rise Board Adhesive @ 4" o.c.	CSA A123.21 (specific test reports available upon request)
Adhered - PARS - Mandatory Cover Board	Structural Concrete, Steel, Wood Plank, Plywood	Optional	Any Sika ^{⊛ (1,2)}	Min 2" Sarnatherm (CG)	1/2" Sarnatherm HD or 1/4" DensDeck Prime	Sikaplan® or Sarnafil® G410 ^(6,7)	37.5 psf	Field: Perimeter: Corner:	Insulation Board fastened 1 per 4 sqft. Cover Board adhered with Sarancol Low Rise Board Adhesive @ 12" o.c. Insulation Board fastened 1 per 2.67 sqft. Cover Board adhered with Sarancol Low Rise Foam @ 12" o.c. Insulation/Cover Board fastened 1 per 1.78 sqft. Cover Board adhered with Sarancol Low Rise Foam @ 6" o.c.	CSA A123.21 (specific test reports available upon request)



Estimators Handbook

ADHERED SYSTEMS											
System	Deck ³	Thermal Barrier⁴	Vapour Retarder	Insulation	Cover Board	Membrane	Field of Roof Pressure	Zones	Attachment	Wind Uplift Approvals	
	Structural			Min 2" Sarnatherm (CG)	1/2" Sarnatherm HD or 1/4" DensDeck Prime	Sikaplan® or Sarnafil® G410 ^(6,7)	35 psf	Field:	Insulation/Cover Board fastened 1 per 4 sqft.	CSA A123.21	
Mandatory Cover	Concrete, Steel, Wood Plank,	Optional	Any Sika® (1,2)					Perimeter:	Insulation/Cover Board fastened 1 per 2.67 sqft.	(specific test reports available upon	
BOdru	Plywood							Corner:	Insulation/Cover Board fastened 1 per 1.33 sqft.	request)	
Adhered DARS	Structural				1/2" DensDeck Prime	Sikaplan [®] or Sarnafil [®] G410 ^(6,7)	50 psf	Field:	Insulation/Cover Board fastened 1 per 4 sqft.	CSA A123.21	
Mandatory Cover	Concrete, Steel, Wood Plank,	Concrete, Steel, Wood Plank, Plywood	nal Any Sika® (1,2)	Min 2" Sarnatherm (CG)				Perimeter:	Insulation/Cover Board fastened 1 per 2.67 sqft.	(specific test reports available upon	
board	Plywood							Corner:	Insulation/Cover Board fastened 1 per 1.33 sqft.	request)	
	Structural Concrete, Steel, Wood Plank, Plywood	tructural crete, Steel, pod Plank,	al Any Sika® (1,2)	Min 2'' Sarnatherm (CG)	No cover Board	Sikaplan [®] or Sarnafil [®]	40 psf	Field:	Insulation/Cover Board fastened 1 per 4 sqft.	CSA A123.21	
Adhered - PARS -No Cover Board								Perimeter:	Insulation/Cover Board fastened 1 per 2.67 sqft.	(specific test reports available upon	
						G410 ^(6,7)		Corner:	Insulation/Cover Board fastened 1 per 1.33 sqft.	request)	
		Steel N.A.	Vapour Retarder SA N.A. 31 or SA 106	Min 2" Sarnatherm (CG) - maximum board size is 4ft. X 4ft.	Optional ⁽⁵⁾	Sikaplan® or Sarnafil® G410 ^(6,7)	35 psf	Field:	Insulation/Cover Board adhered with Sarnacol	CSA A123 21	
Adhered - AARS - No Thermal Barrier	Steel							Perimeter:	Insulation/Cover Board adhered with Sarnacol	(specific test reports available upon	
Steel Deck								Corner:	Insulation/Cover Board adhered with Sarnacol	request)	
									Thermal Barrier with Sarnacol Low Rise Board		
								Field:	Adhesive @ 6" o.c. Insulation/Cover Board adhered with Sarnacol		
					1/2"				Low Rise Board Adhesive @ 12" o.c.		
Adhered - AARS -		Minimum	Vapour Retarder SA	Min 2" Sarnatherm	Sarnatherm	Sikaplan®			Thermal Barrier with Sarnacol Low Rise Board	CSA A123.21	
Thermal Barrier	Steel	1/2" DensDeck	31	(CG) - maximum board size is 4ft. X	HD or 1/4"	or Sarnafil®	60 psf	Perimeter:	Adnesive @ 6" o.c.	(specific test reports	
Steel Deck		Prime	rime or SA 106	4ft.	DensDeck	G410 ^(6,7)			Low Rise Board Adhesive @ 6" o.c.	request)	
					Fille				Thermal Barrier with Sarnacol Low Rise Board		
								Corner:	Adhesive @ 6" o.c.		
										Low Rise Board Adhesive @ 4" o.c.	

	ADHERED SYSTEMS									
System	Deck ³	Thermal Barrier⁴	Vapour Retarder	Insulation	Cover Board	Membrane	Field of Roof Pressure	Zones	Attachment	Wind Uplift Approvals
								Field:	Insulation/Cover Board adhered with Sarnacol Low Rise Board Adhesive @ 12" o.c.	
Adhered - AARS - Concrete Deck	Structural Concrete	N.A.	Vapour Retarder SA 31, SA 106 or TA 138	Min 2" Sarnatherm (CG) - maximum board size is 4ft. X 4ft.	Optional ⁽⁵⁾	Sikaplan® or Sarnafil® G410 ^(6,7)	90 psf	Perimeter:	Insulation/Cover Board adhered with Sarnacol Low Rise Board Adhesive @ 6" o.c.	FM 4470 (specific roof Nav assemblies available upon request)
								Corner:	Insulation/Cover Board adhered with Sarnacol Low Rise Board Adhesive @ 4" o.c.	
General Notes:										
Contact Sika Technical for specific testing requirements. FM 4470 specific Roof Nav assemblies are also available for certain systems tested to CSA A123.21 PARS = Partially Adhered Roof System (some components below the membrane are mechanically attached), AARS = All Adhered Roof System (All components are adhered) Specific Notes: 1. Vapour Retarder TA 138 only used on concrete decks 2. Vapour Retarder SA 31 and SA 106 may require a min 1/2" Thermal Barrier except on concrete decks 3. Structural Concrete (min. 3000 psi), Steel (min. 22Ga 33.4 KSI) , Wood Plank (min. 2"), Plywood (min. 3/4") 4. Minimum Thermal Barrier is 1/2" DensDeck (Prime)										
6. Minimum membrane th	nickness is 60 mil	KOOI BOARD OF I			2 10.044.001					
7. Sikaplan® Adhered (Fe	Sikaplan® Adhered (Feltback), Sarnafil® G410 (Feltback) with Sarnacol 2170R, 2170VC & 2121 adhesive or Sarnafil® G410 SA									

For up to date and accurate information, please consult the current Product Data Sheet for all Sika products at www.sika.ca



c. Mechanical Attachment Guide- Rhinobond



Estimators Handbook

Sarnafil®





d. Attachment Guide – Boards





DENSDECK (PRIME) 4 FT. X 8FT. BOARDS





e. Vapour Retarder Selection Guide

Sheet Products	Sarnavap 6	Sarnavap 10	Vapor Retarder SA 31	Vapor Retarder SA 106	Vapor Retarder TA 138
Roll Size	20' x 100' (6.9m x 30.5m)	20' x 100' (6.9m x 30.5m)	44.8" x 133.8' (1.14m x 40.8m)	39.4" x 49.2' (1m x 15m)	39.4" x 32.8' (1m x 10m)
Application Type	Loose laid	Loose laid	Self-Adhered	Self-Adhered	Torch Applied
Temperature at Application	Any	Any	14°F (-10°C) & above	40°F (-5°C) & above	Any
Substrates ¹	Any	Any	Concrete, Steel ² , Approved Gypsum Boards, Plywood	Concrete, Steel ² , Approved Gypsum Boards, Plywood	Concrete
			Vapor Retarder Primer SB, Vapor	Vapor Retarder Primer SB, Vapor	
Primer	None	None	Retarder Primer VC, Vapor Retarder Primer WB	Retarder Primer VC, Vapor Retarder Primer WB	Vapor Retarder Primer TA
Seams	Sikalastomer 65	Sikalastomer 66	Self-Adhered	Self-Adhered Side Laps, Heat Welded End Laps	Torch Applied
Temporary Roof	No	No	2-months ³	6-months	6-months
WV Permeance E96: perms (ng/[Pa·s·m²])	.263 (15)	0.019 (1.07)	0.018 (1.04)	0.010 (0.543)	0.006 (0.320)
WV Transmission E96: g/[hr·m 2] (g/[24hr·m 2])	NA	0.0054 (0.1304)	0.0070 (0.168)	0.0099 (0.2384)	0.0055 (0.1312)
Air Flow Rate At 75 Pa E2178: L/[s·m²] (L/[Pa·s·m²])	NA	<0.0002 (<0.00008)	<0.0003 (<0.000012)	0.0004 (0.000005)	0.0004 (0.000005)
Roof Board Application	Mechanically Attached or Loose Laid	Mechanically Attached or Loose Laid	Adhered, Mechanically Attached or Loose Laid	Adhered, Mechanically Attached or Loose Laid	Adhered, Mechanically Attached or Loose Laid
Primer Products	Colour	Substrates	Application Temperature	Coverage Rates	VOC (g/L)
Vapor Retarder Primer SB (solvent-based)	Red	Concrete, Approved Gypsum Boards, Plywood	14°F (-10°C) & above	83-138 sf/gal porous 166-416 sf/gal non-porous	500
Vapor Retarder Primer VC (low VOC)	Green	Concrete, Approved Gypsum Boards, Plywood	14°F (-10°C) & above	104-208 sf/gal porous 166-416 sf/gal non-porous	0 with exemption (EPA)* 240 (SCAQMD)* 476.3 w/o exemption*
Vapor Retarder Primer WB (water-based)	Blue	Concrete, Approved Gypsum Boards, Plywood	25°F (-4°C) & above	208 sf/gal depending on porosity	0
Vapor Retarder Primer TA (torch-applied)	Black	Concrete	14°F (-10°C) & above	166-277 sf/gal depending on porosity	340

Notes:

¹ Substrates require priming (primer not required when using Vapor Retarder PE 6 or 10) and must be clean, cured, dry, and free of dirt, dust, oil and debris. Steel substrates do not need priming but must be clean, dry and free of dirt, dust, oil and debris.

² Except on FM insured projects. Meets requirements for UL

³ Light construction traffic

* The U.S. EPA considers the solvents in Vapor Retarder Primer VC as "exempt", and therefore the product's VOC content can be considered "0 g/l" and used in all jurisdictions operating under the EPA guidelines. At this time, the SCAQMD does not recognize the TBAc solvent as "exempt", and therefore the primer's VOC content is "240 g/l" when used in jurisdictions operating under their guidelines.

Physical properties listed above are presented as typical average values as determined by accepted ASTM test methods and are subject to normal manufacturing variation.

Use Mastic at and around all penetrations except on Vapor Retarder PE 6 or PE 10 applications, use Multi-Purpose Tape.



f. Adhesive Selection Guide

Membrane Adhesive Product	Use	Application Temp. Restriction ¹	Dew Point Restriction - Not within 3°C (5°F)LEEDof the Dew pointCompliant		VOC Content		
Sarnacol 2170 VC		1500 (005)	Vec	No -	0 g/L (per EPA)		
Sarnacol 2170 R	All membranes - nonzontal and vertical applications	minus 15°C (0°F)	Yes		694.2 g/L		
Sarnacol 2121	All membranes - horizontal applications up to 2:12 slope				240 g/L		
Sarnacol AD Feltback Membrane Adhesive	All membranes perizontal application	4°C (40°F)	No	Yes	32 g/L		
Sarnacol OM Feltback Membrane Adhesive	An memoranes - nonzontar application				32 g/L		
Membrane Adhesive Product	Packaging	Coverage Rate	Approved Substrat	es:			
Sarnacol 2170 VC Sarnacol 2170 R		44 - 67 sqft / gal ³	Sarnatherm, Sarnatherm CG, Sarnatherm HD Roof Board, Wall, Concrete Deck ^{2,} Cellular Concrete ² & Smooth Plywor	DensDeck Prime, N od	Vetal, Concrete		
Sarnacol 2121	18.9 L (5 05 Gal)	100 - 133 sqft / gal ³	Sarnatherm, Sarnatherm CG, Sarnatherm HD Roof Board, DensDeck Prime, Concrete Deck ^{2,} Cellular Concrete ² & Smooth Plywood				
Sarnacol AD Feltback Membrane	Case: 4 - 1.5L Cartridge	600 sqft /case⁴					
Adhesive	Bag in Box Kit: Part A & Part B - 18.9 L (5 US Gal) each.	2,500 - 3,000 sqft / kit ⁴	Sarnatherm, Sarnatherm CG, Sarnatherm HD Roof Board, DensDeck Prime, Concrete Deck & Cellular Concrete				
Sarnacol OM Feltback Membrane	Case: 4 - 1.5L Cartridge	600 sqft /case ⁴					
Adhesive	Bag in Box Kit: Part A & Part B - 18.9 L (5 US Gal) each.	2,500 - 3,000 sqft / kit ⁴]				
Board Adhesive Product	Use	Application Temp.	Dew Point Restriction - Not within 3°C (5°F)	LEED	VOC Content		
		Restriction -	of the Dew point	Compliant			
Sarnacol LRA		4°C (40°F)	4	Yes	11 g/L		
Sarnacol 2163		minus 15°C (0°F)			18 g/L		
Sarnacol AD Board Adhesive	Insulation / Coverboard		No		32 g/L		
Sarnacol OM Board Adhesive		4°C (40°F)	4		11 g/L		
Sarnacol UM Board Adhesive WG	Deskering	minus 18°C to 18°C (0 to	Annual Cubatnat		50 g/L		
Board Adnesive Product	Раскадіпд	Coverage Rate	Approved Substrat	es:			
Sarnacol LRA	Case: 4 - 1.5L Cartridge	600 sqft /case ⁴	4				
Sarnacol 2163	Case: 4 - 1.5L Cartridge	600 sqft /case ⁴	4				
Sarnacol AD Board Adhesive	Bag in Box Kit: Part A & Part B - 18.9 L (5 US Gal) each.	2,500 - 3,000 sqft / kit ⁴	Approved Sika Vapour Retarders, Sarnatherm, Sarnatherm CG, Sarn		HD Roof Board,		
Sarnacol OM Board Adhesive	Case: 4 - 1.5L Cartridge	600 sqft /case⁴					
	Bag in Box Kit: Part A & Part B - 18.9 L (5 US Gal) each.	2,500 - 3,000 sqft / kit ⁴					
Sarnacol OM Board Adhesive WG	Case: 4 - 1.5L Cartridge	600 sqft /case ⁴					

Notes:

¹Adhesive shall not be used if temperatures are expected below listed temperature during application or subsequent drying time. Check individual product data sheets for proper storage and conditioning temperatures.

²Feltback Membrane only except Bareback Membrane is acceptable over smooth concrete.

³Coverage rate displayed as an average range, bareback vs feltback membrane as well as porous vs non-porous substrates, application method, temperature, and experience with product are some variables which will effect listed values. ⁴Coverage based on 12" o.c. bead spacing.



g. Fastener, Plate & Bar Selection Guide

Fasteners	Deck Type ^{13,8}	Lengths Available	Sarnafastener #12 S	arnafastener #14	Sarnafastener #15 XP	Retrodriller
Samafastener #12	Steel (18 ga - 24 Ga), Wood Plank (min 1-1/2"), Plywood (min 5/8"). Board attachment only.	l – 5/8" to 6"		a 🖚	a ŵ	a 🖚
Samafastener #14	Structural Concrete, Wood Plank (min 1-1/2"), Plywood (min 5/8")	- /4" to 4"			× ×	\checkmark
Sarnafastener #15 XP	Steel (18 ga - 24 Ga), Wood Plank (min I-1/2"), Plywood (min 5/8")	1 1/4" - 20"	÷	·	ۍ 🔪	÷ 🔪
Retrodriller	Purlin Steel 12 Ga - 16 Ga	4" - 10"	#3 Phillips Head	#3 Phillips Head	#3 Phillips Head	#3 Square Drive Flat Head
Bar, Plates & Discs	Use	Systems	Sarnadisc Rhinobon	d Sikaplan Disc	Sarnaplate	
Sarnaplate	Board Attachment	All (except Rhinobond)				
Sarnaplate Low Profile ²	Board Attachment	Adhered Décor				
Sarnadisc Rhinobond	Board/Membrane Attachment	Rhinobond (Metal Retrofit)		((0))		
Sarnadisc Rhinobond Treadsafe	Board/Membrane Attachment	Rhinobond (Metal Retrofit)				
	Membrane Attachment	Sarnafast/Inseam	~~~		~~~~~~	
Sikaplan Disc (Eyehook)	Transition Securement	Sarnafast/Inseam, Rhinobond (Metal Retrofit)	• • • •		È	
Sarnabar	Membrane Attachment	Engineered	and and a			
	Transition Securement	All	Sarnaplate Low Pro	file Sarnaplate B	ar Sarnastop	
Samastop*	Transition Securement	All (except Sarnafast/ Inseam)				
es: astener is to penetrate the steel, concret	e, wood plank deck a minimum 1*			// e//	0	

2 Fastener is to penetrate the underside of the plywood deck by 1/2*

3 Pilot holes are required on structural concrete decks

4 Not to be used on FM projects











h. Warranty Selection Guide

Sikaplan® Warranties									
System	Membrane	Warranty Type	Warranty Length (Years)	High Wind Speed Warranty					
		Membrane or Standard		NA					
Rhinobond, Inseam	Sikaplan®	System	5, 10, 15 or 20	119 and 159 km/h					
		Membrane or Standard		NA					
Adhered	Sikaplan®	System	5, 10, 15 or 20	119 and 159 km/h					
Ballasted	Sikaplan®	Membrane, Standard or System	5 or 10	NA					
Sarnafil® Warranties									
System	Membrane	Warranty Type	Warranty Length (Years)	High Wind Speed Warranty					
		Membrane or Standard	5, 10, 15, 20, 25 ^{2,4} or 30 ^{3,4}	NA.					
Rhinobond, Sarnafast, Engineered	Sarnafil® S327	System	5, 10, 15, 20, 25 ¹ or 30 ³	119, 159 & 193 km/h					
		Membrane or Standard	5, 10, 15, 20, 25 ^{12,4} or 30 ^{1,3,4}	N.A.					
Adhered	Sarnafil® G410, Sarnafil® G410 SA	System	5, 10, 15, 20, 25 ^{1,2} or 30 ^{1,3}	119, 159 & 193 km/h					
		Membrane or Standard	5 10 15 or 20	NA					
Adhered Décor	Sarnafil® G410, Sarnafil® G410 SA	System	5, 10, 15 67 20	119, 159 & 193 km/h					
PMR	Sarnafil® G410, Sarnafil®	Membrane, Standard or System	5,10,15 or 20 ⁶	NA					
Ballasted	Sarnafil® G410	Membrane, Standard or System	5,10,15 or 20 ⁶	NA					

Notes:

* System warranties require all materials from the structural deck up and supplied by Sika

* Standard warranties require all materials for membrane/insulation fixation/adhesion to be supplied by Sika

* All High Wind Speed and Hail warranties must be approved by the Sika Vice President Technical

* PV Systems only permitted on Saranfil adhered or mechanically attached roof systems. Sika approved cover board is required for any systems with a PV installation.

* Sika approved vapour retarders are required for all wind warranties

* Vegetative roofs are considered PMR systems. A Sika approved cover board is required in there is insulation below the membrane

* XPS/EPS insulation, bitumen cannot come into contact with the membrane

* Contact the Technical Representative if Coal Tar Pitch is present in the existing roof system

¹ Criteria for all 25 & 30 year warranties - Adhered Roofs. Mechanical fixation is required, for one of the layers (coverboard, insulation or thermal barrier) below the membrane, which incorporate Steel, Wood Plank or Plywood structural deck

² Criteria for all <u>25 year</u> warranties: Sarnavap 6 NOT permitted, minimum 72 mil membrane, Sarnatherm CG or Rockwool DD and Sika approved cover board are required.

³ Criteria for all <u>30 year</u> warranties: Sarnavap 6 NOT permitted, minimum 80 mil membrane, Sarnatherm CG or Rockwool DD and Sika approved cover board are required

⁴ Criteria for 25.8.30 year Standard warranty: Contact your Sales Representative

⁵ 72 mil membrane required

⁶ 80 mil membrane required



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i. Guideline for Roof Recover

General Criteria:

- 1. The Owner's Representative and Applicator shall determine the condition of the existing roof deck and old roof system.
 - a. Areas with deteriorated decking or wet materials are to be removed and replaced.
 - b. Acceptable existing roofing must be sound, well adhered and free of any trapped moisture. Verification that the roof system is free of trapped moisture must be established with a moisture scan and a copy of the moisture scan must be provided to the manufacturer.
- 2. Existing Single Ply roofs.
 - a. All gravel and debris shall be removed
 - b. Cut the existing membrane into 10 ft x 10 ft panels (3.0 m x 3.0 m) or cut 6" (15.2 cm) circles down the centre of each sheet, every 5 to 8 ft (1.5 to 2.4 m).
 - c. The surface must be clean and dry
 - d. Install a layer of a Sika Corporation approved cover roof board or new insulation board over the cut single ply and then fasten the board according to Sika Corporation's requirements.
- 3. Existing graveled surfaces bitumen roofs.
 - a. All gravel and debris shall be removed.
 - b. All blisters shall be removed and sealed or cut, fastened down and sealed.
 - c. Any accumulation of bitumen or other irregularities shall be scratched and removed so as to produce a smooth surface.
 - d. The surface must be clean and dry
 - e. Install a layer of a Sika Corporation approved cover roof board or new insulation board over the existing roof membrane and fasten the board according to Sika Corporation's requirements.
- 4. Existing smooth surfaced roofs.
 - a. All debris shall be removed
 - b. All blisters shall be removed and sealed or cut, fastened down and sealed.
 - c. Seal all voids or openings into the existing membrane system. Repair all areas that are wet with like in kind roofing per allowable building code standards.
 - d. The surface must be clean and dry
 - e. Install a layer of a Sika Corporation approved cover roof board or new insulation board over the existing roof membrane and fasten the board according to Sika Corporation's requirements.

Note: Coal-tar pitch or heavily restored roofs require removal. Contact Technical Services Roofing, Sika Canada Warranties:

Sika Canada offers Membrane Only and Standard Warranties (Labour & Material) for duration up to 20 years.



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9. TYPICAL DETAIL DRAWINGS



- 1) NEW OR EXISTING WOOD NAILERS SHALL BE ATTACHED ACCORDING TO THE NATIONAL BUILDING CODE OF CANADA, THE DESIGNER OF RECORD., LOCAL CODE, OR INSURANCE REQUIREMENTS, WHICHEVER IS MORE STRINGENT.
- 2) FOR PERIMETER EDGE AIR SEAL SEE DETAIL CAN 1







PERIMETER EDGE AIR SEAL WHEN AIR BARRIER IS NOT CONTINUOUS WITH THE EXTERIOR FLASHING MEMBRANE

- New or existing wood nailers shall be attached according to the designer of record local code, or insurance requirements, whichever is more stringent. Nailer height to match top surface to which membrane is to be applied.
- 2) SEAL SHALL BE MADE TO PREVENT AIR AND VAPOUR PENETRATION INTO THE SIKA SARNAFIL SYSTEM







- NEW OR EXISTING WOOD NAILERS SHALL BE ATTACHED ACCORDING TO THE DESIGNER OF RECORD., THE NATIONAL BUILDING CODE OF CANADA, LOCAL CODE, OR INSURANCE REQUIREMENTS, WHICHEVER IS MORE STRINGENT.
- 2) FACE DIMENSION OF FASCIA SHALL BE A MINIMUM OF 3" OR AS OTHERWISE REQUIRED TO EXTEND A MINIMUM OF 1-1/2" BELOW BOTTOM OF WOOD NAILER.
- 3) THE HORIZONTAL FLANGE OF FASCIA SHALL BE A MINIMUM OF 4" WIDE.
- 4) SCREWS USED TO ATTACH EITHER THE CONTINUOUS CLEAT OR FASCIA SHALL PENETRATE THE NAILER A MINIMUM OF 1".
- 5) FASTENER WITHDRAWAL RESISTANCE SHOULD BE 100 LB MIN. USE NO. 8 MIN. SCREWS PENETRATING 3/4". FASTENER IS PLACED EITHER CENTERED INTO TOP WOOD NAILER OR 1" FROM TOP EDGE OF CLEAT HOOK STRIP ⊕ 4" O.C.
- 6) FASTENED 4" O.C. AND STAGGERED BETWEEN 1" AND 1-1/2" FROM TOP BACKSIDE EDGE OF FASCIA COVER. THE MAXIMUM RATING ACHIEVED FOR (L) DIMENSION FASCIA HEIGHT IS AS FOLLOWS: 210 PSF @ 8", 310 PSF @ 6", AND 470 PSF @ 4"
- 7) SEE DETAIL CAN 1-1B FOR SARNACLAD METAL JOINTS







- NEW OR EXISTING WOOD NAILERS SHALL BE ATTACHED ACCORDING TO THE DESIGNER OF RECORD., THE NATIONAL BUILDING CODE OF CANADA, LOCAL CODE, OR INSURANCE REQUIREMENTS, WHICHEVER IS MORE STRINGENT.
- BRING BAREBACK MEMBRANE OVER ROOF EDGE AND DOWN OUTSIDE FACE OF WALL, COVERING WOOD NAILER(S) COMPLETELY. BRING FELTBACK MEMBRANE TO ROOF EDGE ONLY.
- 3) FACE DIMENSION OF FASCIA SHALL BE A MINIMUM OF 3" OR AS OTHERWISE REQUIRED TO EXTEND A MINIMUM OF 1-1/2" BELOW BOTTOM OF WOOD NAILER.
- 4) THE HORIZONTAL FLANGE OF FASCIA SHALL BE A MINIMUM OF 4" WIDE.
- 5) SCREWS USED TO ATTACH EITHER THE CONTINUOUS CLEAT OR FASCIA SHALL PENETRATE THE NAILER A MINIMUM OF 1".
- 6) FASTENER WITHDRAWAL RESISTANCE SHOULD BE 100 LB MIN. USE NO. 8 MIN. SCREWS PENETRATING 3/4". FASTENER IS PLACED EITHER CENTERED INTO TOP WOOD NAILER OR 1" FROM TOP EDGE OF CLEAT HOOK STRIP @ 4" O.C.
- 7) FASTENED 4" O.C. AND STAGGERED BETWEEN 1" AND 1-1/2" FROM TOP BACKSIDE EDGE OF FASCIA COVER. THE MAXIMUM RATING ACHIEVED FOR (L) DIMENSION FASCIA HEIGHT IS AS FOLLOWS: 210 PSF ⊕ 8", 310 PSF ⊕ 6", AND 470 PSF ⊕ 4"
- 8) SEE DETAIL CAN 1-1B FOR SARNACLAD METAL JOINTS









When installing Sarnaclad metal, ensure that metal foil tape is installed prior to welding the G410 patch over the joint.

1. Adjacent sheets of Sarnaclad metal shall be spaced ¼ in. (7 mm) apart. Sarnaclad shall be secured at joints. The joint shall be covered with 2 in. (51 mm) wide aluminum foil tape. A 4 in. (102 mm) wide strip of flashing membrane shall be hot air welded over the joint (see detail above).

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- 1) METAL EXTENDER PIECE IS REQUIRED IF EXISTING COUNTERFLASHING IS CONTAMINATED AND OR
- COUNTERFLASHING FASCIA IS LESS THAN 4" WIDE, FASTENED 12" O.C. WITH GROMMETTED FASTENER.
- METAL COUNTERFLASHING IS TO BE INSTALLED TO MEET LOCAL CODES AND REQUIREMENTS.
 SEALANT IS A MAINTENANCE ITEM AND IS NOT COVERED UNDER THE SARNAFIL WARRANTY.



SIKAFLEX®-1A TO CLEAN SURFACE SPECIFIED GROMMETED SECUREMENT < SIKAFLEX®-1A TO CLEAN SURFACE APPROVED SIKA SARNAFIL TERMINATION BAR AT BASE OF WALL OR CURB SIKALASTOMER®-65 OR SIKAFLEX®-1A ALTERNATE BASE FASTENING Ø SARNASTOP FASTENED 12" O.C. SARNAFIL\SIKAPLAN FLASHING ADHERED TO ACCEPTABLE SUBSTRATE SPECIFIED SIKA SARNAFIL SECUREMENT HOT-AIR WELD SARNAFIL\SIKAPLAN MEMBRANE /// /// STRUCTURAL DECK U INSULATION SECURED AS REQUIRED VAPOUR RETARDER (AS REQUIRED)

NOTES:

1) SEALANT IS A MAINTENANCE ITEM AND IS NOT COVERED UNDER THE SARNAFIL WARRANTY.





- SEALANT IS A TWO-STEP APPLICATION: BEHIND TOP OF SARNAFIL FLASHING THEN TOP OF 1) TERMINATION BAR.
- 2) SEALANT IS A MAINTENANCE ITEM AND IS NOT COVERED UNDER THE SARNAFIL WARRANTY.
- 3) REFER TO CAN 3-7A FOR ADDITIONAL DETAIL 4) REFER TO PARAPET AND WALL DETAILS FOR ACCEPTABLE COUNTERFLASHING











- 1) NEW OR EXISTING WOOD NAILERS SHALL BE ATTACHED ACCORDING TO THE DESIGNER OF RECORD., THE NATIONAL BUILDING CODE OF CANADA, LOCAL CODE, OR INSURANCE REQUIREMENTS, WHICHEVER IS MORE STRINGENT.. NAILER HEIGHT TO MATCH TOP SURFACE TO WHICH MEMBRANE IS TO BE APPLIED.
- 2) METAL COPING MAY BE SHAPED TO MATCH EXPANSION JOINT SHAPE






COUNTERFLASHING FASCIA IS LESS THAN 4" WIDE, FASTENED 12" O.C. WITH GROMMETTED FASTENER. 2) METAL COUNTERFLASHING IS TO BE INSTALLED ACCORDING TO THE DESIGNER OF RECORD., THE NATIONAL BUILDING CODE OF CANADA, LOCAL CODE, OR INSURANCE REQUIREMENTS, WHICHEVER IS MORE STRINGENT.

¹⁾ METAL EXTENDER PIECE IS REQUIRED IF EXISTING COUNTERFLASHING IS CONTAMINATED AND OR





- METAL FOIL TAPE IS TO BE USED AS A SEPARATION IF SIKAILASTIC WOULD COME INTO CONTACT WITH INCOMPATIBLE MATERIALS OR CONTAMINATION.
 VAPOUR BARRIER SHALL BE SEALED AT THE PERIMETER, SEAMS AND ALL PENETRATIONS.
 SEALANT IS A MAINTENANCE ITEM AND IS NOT COVERED UNDER THE ROOFPRO WARRANT
 REFER TO LAM CAN 1-0 FOR AN ANGLE TRANSITIONAL WITH CRACKS.





APPROVED SIKA SARNAFIL FIXATION UNDER BASE FLASHING NOT SHOWN.

APPROVED SIKA SARNAFIL FIXATION UNDER BASE FLASHING NOT SHOWN.
 SEALANT IS A MAINTENANCE ITEM AND IS NOT COVERED UNDER THE SARNAFIL WARRANTY.





- EXISTING DRAIN BOWL, CLAMPING RING, AND DRAIN ACCESSORIES ARE TO BE CLEANED FREE OF ALL CONTAMINATES.
- 2) SARNAFIL G459 MEMBRANE MUST BE USED IN AREAS OF ASPHALT CONTAMINATION.
- 3) FOR SUMPS GREATER THAN 3/12 SLOPE, REFER TO STEEP SUMP TECHNICAL BULLETINS.
- 3) SEALANT IS A MAINTENANCE ITEM AND IS NOT COVERED UNDER THE SARNAFIL WARRANTY.



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- NEW OR EXISTING WOOD NAILERS SHALL BE ATTACHED ACCORDING TO THE DESIGNER OF RECORD., THE NATIONAL BUILDING CODE OF CANADA, LOCAL CODE, OR INSURANCE REQUIREMENTS, WHICHEVER IS MORE STRINGENT. NAILER HEIGHT TO MATCH TOP SURFACE TO WHICH MEMBRANE IS TO BE APPLIED.
- 2) SIKA SARNAFIL IS NOT RESPONSIBLE FOR WATER BLOCKAGE OR BACKUP IN DRAIN LINES.
- CONSULT SIKA SARNAFIL REGIONAL TECHNICAL DEPARTMENT FOR ADDITIONAL INFORMATION.
- 4) SEALANT IS A MAINTENANCE ITEM AND IS NOT COVERED UNDER THE SARNAFIL WARRANTY.





- 1) IF EXISTING PENETRATION IS CONTAMINATED, WRAP METAL FOIL TAPE AROUND PENETRATION PRIOR TO FLASHING PENETRATION.
- 2) SEALANT IS A MAINTENANCE ITEM AND IS NOT COVERED UNDER THE SARNAFIL WARRANTY.
- 3) DO NOT WELD OUTSIDE EDGE OF FLASHING.









- 1) 2) SEALANT IS A MAINTENANCE ITEM AND IS NOT COVERED UNDER THE SIKA WARRANTY.
- THE EMPTY SPACE MUST BE FILLED WITH AN EXPANDING URETHANE FOAM OR OTHER SIKA APPROVED INSULATION. THIS WILL MINIMIZE CONDENSATION FORMATION AS WELL AS PROVIDING SOME RESILIENCY TO THE FINISHED DETAIL









- 1) SEALANT IS A MAINTENANCE ITEM AND IS NOT COVERED UNDER THE SIKA WARRANTY.
- 2) PIPE SEAL MUST HAVE INTACT RIB AT TOP EDGE, REGARDLESS OF PIPE DIAMETER.
 3) DECK FLANGES OF THE PRE-MOLDED PIPE SEAL SHALL NOT BE OVERLAPPED, CUT, OR APPLIED OVER ANY ANGLE CHANGE.
- 4) THE EMPTY SPACE MUST BE FILLED WITH AN EXPANDING URETHANE FOAM OR OTHER SIKA APPROVED INSULATION. THIS WILL MINIMIZE CONDENSATION FORMATION AS WELL AS PROVIDING SOME RESILIENCY TO THE FINISHED DETAIL.





- SARNAFIL MEMBRANE SHALL NOT BE IN CONTACT WITH SURFACES HAVING SUSTAINED TEMPERATURES ABOVE 40°C (104°F).
- 2) ALUMINUM TAPE IS REQUIRED IF EXISTING PENETRATION IS CONTAMINATED.
- 3) SEALANT IS A MAINTENANCE ITEM AND IS NOT COVERED UNDER THE SARNAFIL WARRANTY.





- APPROVED FIXATION UNDER BASE FLASHING NOT SHOWN.
 SEALANT IS A MAINTENANCE ITEM AND IS NOT COVERED UNDER THE SARNAFIL WARRANTY.
- 3) FOR ALTERNATE FLASHING DETAIL REFER TO CAN 7-5A





APPROVED FIXATION UNDER BASE FLASHING NOT SHOWN.
 SEALANT IS A MAINTENANCE ITEM AND IS NOT COVERED UNDER WARRANTY.





2) SEALANT POCKETS ARE TO BE ELIMINATED WHERE POSSIBLE.
 2) SEALANT IS A MAINTENANCE ITEM AND IS NOT COVERED UNDER THE SIKA WARRANTY.



PITCH POCKETS ARE TO BE ELIMINATED WHERE POSSIBLE.
 SEALANT IS A MAINTENANCE ITEM AND IS NOT COVERED UNDER THE SARNAFIL WARRANTY.







- 1) EXISTING CABLE SHALL BE CLEANED FREE OF ASPHALT CONTAMINATION AS REQUIRED PRIOR TO REINSTALLATION.
- IF ASPHALT CONTAMINATION CAN NOT BE CLEANED, SIKA SARNAFIL REQUIRES A CONTINUOUS LAYER OF G 459 FLASHING UNDER LOCATION OF CABLE, HOT-AIR WELDED IN PLACE.
 A SEPERATION LAYER OF SARNAFIL OR SIKAPLAN BETWEEN THE SUPPORTS AND FIELD MEMBRANE MAY
- BE WELDED OR UNWELDED AS DESIRED
- 4) SIKA IS NOT RESPONSIBLE FOR LIGHTNING DAMAGE.
- 5) SEALANT IS A MAINTENANCE ITEM AND IS NOT COVERED UNDER THE SARNAFIL WARRANTY.







- NOTES: 1) EXISTING CABLE SHALL BE CLEANED FREE OF ASPHALT CONTAMINATION AS REQUIRED PRIOR TO REINSTALLATION.
- CONTINUES ALLATION. 2) IF ASPHALT CONTAMINATION CAN NOT BE CLEANED, SIKA SARNAFIL REQUIRES A CONTINUOUS LAYER OF G 459 FLASHING UNDER LOCATION OF CABLE, HOT-AIR WELDED IN PLACE. 3) SIKA IS NOT RESPONSIBLE FOR LIGHTNING DAMAGE.





- 1) EXISTING CABLE SHALL BE CLEANED FREE OF ASPHALT CONTAMINATION AS REQUIRED PRIOR TO REINSTALLATION.
- IF ASPHALT CONTAMINATION CAN NOT BE CLEANED, SIKA SARNAFIL REQUIRES A CONTINUOUS LAYER OF G 459 FLASHING UNDER LOCATION OF CABLE, HOT-AIR WELDED IN PLACE.
 SIKA IS NOT RESPONSIBLE FOR LIGHTNING DAMAGE.
 END LAPS OF COVERSTRIP ARE NOT TO BE WELDED





- WEIGHT OF UNIT TO BE EVENLY DISTRIBUTED OVER CROSS-SECTIONAL AREA OF EXPOSED WOOD NAILER.
- 2) IF WEIGHT OF UNIT EXCEEDS MAXIMUM ALLOWED BY INSULATION MANUFACTURER, A WOOD NAILER BELOW THE SARNAFIL MEMBRANE IS REQUIRED.







- WOOD NAILER MAY BE REQUIRED AT VALLEY. 1)
- FASTENING IS REQUIRED IN MECHANICALLY ATTACHED SYSTEMS.
 FASTENING IS REQUIRED ON SLOPES 5/12 AND GREATER WHEN USING SARNACOL 2170 / 2170 VC.
 FASTENING IS REQUIRED ON SLOPES 2/12 AND GREATER WHEN USING SARNACOL 2121.





- WOOD NAILER MAY BE REQUIRED AT PEAK. 1)
- WOOD NAMEER MAT BE REQUIRED AT PEAR.
 FASTENING IS REQUIRED IN MECHANICALLY ATTACHED SYSTEMS.
 FASTENING IS REQUIRED ON SLOPES 5/12 AND GREATER WHEN USING SARNACOL 2170 / 2170 VC.
 FASTENING IS REQUIRED ON SLOPES 2/12 AND GREATER WHEN USING SARNACOL 2121.







- NEW OR EXISTING WOOD NAILERS SHALL BE ATTACHED ACCORDING TO THE DESIGNER OF RECORD., THE NATIONAL BUILDING CODE OF CANADA, LOCAL CODE, OR INSURANCE REQUIREMENTS, WHICHEVER IS MORE STRINGENT. NAILER HEIGHT TO MATCH TOP SURFACE TO WHICH MEMBRANE IS TO BE APPLIED.
- 2) REMOVE ALL GRAVEL AT TIE-IN AREA.
- 3) CONSULT SIKA SARNAFIL FOR RECOMMENDATIONS FOR TIE-IN TO COAL-TAR PITCH.
- 4) SEALANT WILL BE APPROPRIATE FOR STRUCTURAL DECK TYPE. CONSULT SIKA SARNAFIL TECHNICAL FOR DIRECTION







- 1) FOLLOW EXISTING MEMBRANE MANUFACTURER RECOMMENDATIONS FOR TIE-IN DETAIL AND RECOMMENDATION FOR CLEANING MEMBRANE.
- 2) CLEAN EXISTING ROOF MEMBRANE PRIOR TO HOT-AIR WELDING,
- 3) CONSULT SIKA SARNAFIL FOR THE-IN TO COAL-TAR PITCH.
- 4) METAL FOIL TAPE SHALL BE ADDED AS REQUIRED TO PREVENT ANY CONTACT BETWEEN SIKA MEMBRANES AND OTHER MEMBRANES
- 5) APPROVED SIKA SEALANT TO PREVENT WATER MIGRATION INTO THE NEW ROOF SYSTEM.



- METAL FOIL TAPE MUST COVER THE ENTIRE LENGTH OF SARNAFIL OR SIKAPLAN MEMBRANE AT TIE-IN
- 1) METAL FOIL TAPE MUST COVER THE ENTIRE LENGTH OF SARNAFIL OR SIKAPLAN MEMBRANE AT THE-2) METAL FOIL TAPE MUST BE PLACED ALONG THE LEADING EDGE OF THE NON COMPATIBLE MATERIAL AND 1' UP ALL LAP EDGES OF THE NON COMPATIBLE MATERIAL TO MITIGATE BLEEDING OF NON-COMPATIBLE MATERIALS ONTO SIKA SARNAFIL MEMBRANES
- 3) ANY CONTAMINATION OF THE SIKA SARNAFIL MEMBRANE MUST BE CORRECTED PRIOR TO WARRANTY ISSUE.
- 4) SEALANT IS A MAINTENANCE ITEM AND IS NOT COVERED UNDER THE WARRANTY.

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NOTE: 1) MINIMUM PERIMETER DETERMINED BY THE NATIONAL BUILDING CODE OF CANADA CALCULATIONS. 2) A MINIMUM OF 2 PERIMETER HALF SHEETS MUST BE USED. 3) INTERMEDIATE FASTENER ROWS TO BE INSTALLED MIDWAY BETWEEN THE FASTENER ROWS.

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