BASF

The Chemical Company

BASF CONSTRUCTION CHEMICALS AUSTRALIA and NEW ZEALAND

APPLICATION GUIDE for CONIDECK 2269

IMPORTANT: READ THIS FIRST

BASF Construction Chemicals does not warrant the performance of this product unless the instructions of this document and other related BASF Construction Chemicals documents are adhered to in all respects.

1. SURFACE PREPARATION

Ensure the concrete is profile free, no ridges or troughs, etc. The substrates shall be free of laitance, loose or friable materials, debris and all contaminants by mechanical means preferably by captive shot blasting with hand held diamond grinders for edge work to achieve CSP 3 finish. Bag up blowholes, especially on vertical surfaces, and carry out any necessary repairs in good time prior to priming. "Bagging up" should be carried out using Concresive 1444 or Concresive 1446.

To vertical surfaces, all form release agent must be removed prior to applying any primer.

Ensure adequate masking off of adjacent areas has been completed and all detailing is in accordance with the project drawing.

2. Priming

2.1 CONCRESIVE 2525

Before mixing, pre-condition both A and B components to a temperature of approximately 15 to 25 °C. Pour the entire contents of Part B into the container of Part A. DO NOT MIX BY HAND. Mix with a mechanical drill and paddle at a very low speed (ca. 300rpm) for at least 3 minutes. Scrape the sides and the bottom of the container several times to ensure complete mixing. Keep the mixer blades submerged in the primer to avoid introducing air bubbles. DO NOT WORK OUT OF THE ORIGINAL CONTAINER. After proper mixing to a homogeneous consistency pour the mixed Parts A and B into a fresh container and mix for another minute.

Apply a thin coat of CONCRESIVE 2525 to the prepared substrate by spreading with a squeegee at the minimum rate of 0.3 – 0.5 kg/m² and finished with a roller. Porous substrates may require a second coat to ensure the surface is fully sealed. Broadcast MASTERTOP FILLER F5 at a rate of 0.8 – 1.0kg/m2 into the still-wet primer to produce a light, even cover. Allow to cure for at least 6 hours before removing all excess sand with a stiff broom and vacuum

Note:

1. CONCRESIVE 2525 shall be applied when the ambient temperature is constant or falling, as this will decrease the risk of bubble formation due to expansion of air that is enclosed in the concrete
2. CONCRESIVE 2525 shall be applied when the substrate temperature is 8-30deg C
3. The Tensile Strength of the concrete shall not be less than 1.5MPa and the residual moisture shall not be more than 6%
4. Membrane application onto primer

Application	at 10ºC at 20°C at 30°C at 30°C & > 80% RH	hr hr hr hr	min. 12 min 9 min 4* min 4*

* When primer is tack free subsequent coat can be applied.

2.2 MASTERTOP P679

Before application, pre-condition the product to a temperature of approximately 15 to 25 °C. Pour the amount required from the original container into an application container and apply a thin coat by spreading with a squeegee at the minimum rate of 0.05 – 0.1 kg/m² and finished by back rolling with a roller.

Note:

1. MASTERTOP P 679 is moisture curing and will foam if applied too thickly and this will cause de-bonding between primer and subsequent coats
2. Coating interval: Mastertop P 679 should be tack free before application of the membrane.

Mastertop P 679 and	at 10°C	hours	min. 4
membrane application		hours	max. 6
window	at 20°C	hours	min. 2
		hours	max 5
	at 30°C &	hours	min. 1
	>80% RH	hours	max. 3

3. Membrane
3.1 CONIPUR M 860

Ensure surface for application is dry, free from dust, debris and all other contaminants which may inhibit adhesion between the membrane and primer.

Before mixing, pre-condition both A and B components to a temperature of approximately 15 to 25 °C. Pour the entire contents of Part B into the container of Part

A. DO NOT MIX BY HAND. Mix with a mechanical drill and paddle at a very low speed (ca. 300rpm) for at least 3 minutes. Scrape the sides and the bottom of the container several times to ensure complete mixing. Keep the mixer blades submerged in the coating to avoid introducing air bubbles. DO NOT WORK OUT OF THE ORIGINAL CONTAINER. After proper mixing to a homogeneous consistency pour the mixed Parts A and B into a fresh container and mix for another minute.

Apply CONIPUR M 860 with a squeegee or gauge rake at the minimum rate of 1.6 – 2.2 kg/m^2 (1.1-1.6mm WFT), Spike roll after a 10 minute interval to remove any entrained air.

Allow the membrane to cure for at least 5 hours at 20^{o}C prior to subsequent topping.

Application to joints to joining walls, up stands and other details will require the use on the Conipur M 860 Thix

Note:

1. CONIPUR M 860 must be applied within the recommended temperature and relative humidity limits.
2. The temperature of the substrate must be at least 3 K above the dew point during the application

4. Wear Coat
4.1 CONIPUR M 867 F

Ensure surface for application is dry, free from dust, debris and all other contaminants.

Before mixing, pre-condition both A and B components to a temperature of approximately 15 to 25 °C. Pour the entire contents of Part B into the container of Part A. DO NOT MIX BY HAND. Mix with a mechanical drill and paddle at a very low speed (ca. 300rpm) for at least 3 minutes. Scrape the sides and the bottom of the container several times to ensure complete mixing. Keep the mixer blades submerged in the coating to avoid introducing air bubbles. DO NOT WORK OUT OF THE ORIGINAL CONTAINER. After proper mixing to a homogeneous consistency pour the mixed Parts A and B into a fresh container and mix for another minute.

Apply CONIPUR M 867 F over the CONIPUR M860 with a squeegee at the minimum rate of 1.2 – 1.5 kg/m^2.

Broadcast to refusal with Filler F5 into the still wet wear coat at the rate of 3.0 – 5.0g/m2. Allow to cure for at least 9 hours before removing all excess quartz with a stiff broom and vacuum. The achieved thickness shall be 3-4mm.

Note:

1. IN tropical climates it is important that CONIPUR M 867 F is applied over CONIPUR M860 2-8 hours after the application of the membrane to ensure good bonding. Do not apply more CONIPUR M860 that cannot be coated with CONIPUR M 867 F on the same day
2. Wear coat application times onto Conipur M860

Membrane to wear coat application window	at 10ºC	hr	min. 8
		hr	max. 36
	at 20°C	hr	min 5
		hr	max 24
	at 30°C	hr	min 3
		hr	max 16
	at 30°C and >80% RH humidity	hr	min 2
		hr	max 8

In tropical climates should the coating of CONIPUR M 867 F over CONIPUR M860 exceeds 8 hours or exposed to rain, apply 1 thin coat of MASTERTOP P 679 (observe re-coating intervals of MASTERTOP P 679) to the clean and dry CONIPUR M860. For application exceeding 7 days, then abrade the surface to remove any contaminants and solvent wipe before applying the MASTERTOP P 679

3. It is important that CONIPUR M 867 F is applied over clean and dry CONIPUR M 860

5. Surface Coating
5.1 CONIPUR TC 458

Ensure surface for application is dry, free from dust, debris, un-bound broadcast sand and all other contaminants.

Prior to application, CONIPUR TC 458 shall be preconditioned to a temperature of between 15 and 25 °C.
Mix with a mechanical drill and paddle at a low speed (approx. 300 rpm) until product is homogeneous.

Apply CONIPUR TC 458 polyurethane top coat over CONIPUR M 867 F at least 9 hours later with a squeegee and followed by back rolling with 12-14mm nap roller in the specified colour at a rate of 0.5 – 0.8 kg/m² in one coat to achieve a dry film thickness of 0.2 – 0.32mm. Allow to cure for at least 4 days before opening to traffic.

Note:

1. The temperature of the substrate must be at least 3 °C above the dew point before application and must remain so until the topcoat has cured.
2. Topcoat Conipur TC 458 application times onto Conipur M867F intervals as below

Top Coat Application	at 10ºC at 20°C at 30°C at 30°C & > 80% RH	hr hr hr hr	min. 12 min 9 min 6 min 6

6. Protection of Work

The car park deck must not be used as a working platform by other trades unless fully protected to the satisfaction of the Contract Administrator and the Applicator.

No harmful substances should come into contact with the new system.

No building materials, scaffolding, plant machinery etc should be stored on the deck.

Finished works must be protected from damage by subsequent building operations.

7. Calculation of Dew Point

To determine the Dew Point from the charts below, find the temperature of the air in question on the left side of the table. Next, locate the relative humidity of the air in question across the top of the table. The intersection of these two numbers in the matrix identifies the temperature at which Dew Point is reached.

When air comes in contact with a surface that is at or below its Dew Point temperature, condensation will form on that surface.

Example:

If the temperature in a facility is 24º C and the relative humidity is 35%, the intersection of the two shows that the Dew Point is reached at a temperature of 7º C, or below. This means that moisture vapour in the 24º C / 35% RH air will condense on any surface that is at or below the Dew Point temperature of 7º C.

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Air Temp °C	% Relative Humidity																		
	100	95	90	85	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10
43	43	42	41	40	39	38	37	35	34	32	31	29	27	24	22	18	16	11	5
41	41	39	38	37	36	35	34	33	32	29	28	27	24	22	19	17	13	8	3
38	38	37	36	35	34	33	32	30	29	27	26	24	22	19	17	14	11	7	0
35	35	34	33	32	31	30	29	27	26	24	23	21	19	17	15	12	9	4	0
32	32	31	31	29	28	27	26	24	23	22	20	18	17	15	12	9	6	2	0
29	29	28	27	27	26	24	23	22	21	19	18	16	14	12	10	7	3	0	
27	27	26	25	24	23	22	21	19	18	17	15	13	12	10	7	4	2	0	
24	24	23	22	21	20	19	18	17	16	14	13	11	9	7	5	2	0		
21	21	20	19	18	17	16	15	14	13	12	10	8	7	4	3	0			
18	18	17	17	16	15	14	13	12	10	9	7	6	4	2	0				
16	16	14	14	13	12	11	10	9	7	6	5	3	2	0					
13	13	12	11	10	9	8	7	6	4	3	2	1	0						
10	10	9	8	7	7	6	4	3	2	1	0								
7	7	6	6	4	4	3	2	1	0										
4	4	4	3	2	1	0													
2	2	1	0																

PRECAUTIONS

BEFORE USE, READ ALL APPLICATION, SAFETY DIRECTIONS AND WARNINGS ON PRODUCT PACKAGING AND TECHNICAL DATA SHEETS. REFER TO MATERIAL SAFETY DATA SHEETS FOR HANDLING PROCEDURES.