

Allsealed System Guide

15 to 25 Years Lifetime Coatings







Introduction

Leeson Allsealed is a high-performance liquid applied roofing system, providing a 15 to 25 year protection life for pitched and flat roofs.

For flat roofs this high-performance polyurethane system is suitable for all types of projects including new build and refurbishment and its liquid formula allows complex detailing to be simplified. The system is a high build, moisture triggered polyurethane membranes that cure together to form a seamless, durable waterproof coating for all flat roof types.

For pitched roofs Leeson Allsealed is an ideal solution for cost effective waterproofing of all types of pitched and corrugated sloping roofs with a pitch greater than 15°. Requiring only local reinforcing to joints, seams and overlaps this high build, moisture triggered system provides a cost effective and versatile system for long term waterproofing. Ideal for corrugated asbestos sheets as it encapsulates the existing substrate without the expensive requirement of full removal or over –cladding.

The 25 year system carries a B Roof (t4) to BS ENV 1187: 2002 Test 4 and BS EN 13501-5:2016.

Features and Benefits

- Long term systems 15 to 25 year protection life to first maintenance
- Independently tested fire resistance ratings to comply with legislation
- Only local reinforcing on joint and seams required reducing application costs
- All areas of the roof encapsulated and protected against water ingress
- Simple brush/roller application No complex or expensive tools required to apply
- UV resistant Will not crack through embrittlement from sunlight
- Will not chalk Remains aesthetically pleasing and less prone to early membrane failure
- Non foaming Reducing likelihood of air entrapment and blisters
- No need to remove and dispose of existing roof materials Saving costs on waste
- Single pack formulations Less material waste and packaging
- Fully bonded to deck system

Explanation of the System Components

The following components comprise the Leeson Polyurethanes Allsealed System:

- Leeson Allsealed Embedment Coat (PU5558) is a single component high solids product and is supplied ready for use in 22 kg tins
- Leeson Allsealed Top Coat (PU5574) is a single component high solids product and is supplied ready for use in 22 kg tins
- Leeson Allsealed 225gsm Reinforcing Mat is an emulsion bound chopped strand reinforcement mat is supplied in 1m wide x 100m length rolls, and also narrower rolls for detailed work.
- LeesonPrime PU3922 is a solvented polyurethane single component primer and is supplied ready to use in 5 litre tins



15 to 25 Year Flat Roof System

Application Levels

The application quantity for Leeson Allsealed is dependent on the required protection life:

Material	Leeson Allsealed Waterproofing System 15 Year Protection Life	
LeesonPrime PU3922 (If required)	0.125 litre per square metre	
Leeson Allsealed Embedment Coat (PU5558)	1.2 litre per square metre	
Leeson Allsealed 225gsm Reinforcing Mat	225 grams per square metre	
Leeson Allsealed Top Coat (PU5574)	0.75 litre per square metre	

Material	Leeson Allsealed Waterproofing System 20 Year Protection Life	
LeesonPrime PU3922 (If required)	0.125 litre per square metre	
Leeson Allsealed Embedment Coat (PU5558)	1.2 litre per square metre	
Leeson Allsealed 225gsm Reinforcing Mat	225 grams per square metre	
Leeson Allsealed Top Coat (PU5574)	1 litre per square metre	

Material	Leeson Allsealed Waterproofing System 25 Year Protection Life	
LeesonPrime PU3922 (If required)	0.125 litre per square metre	
Leeson Allsealed Embedment Coat (PU5558)	1.2 litre per square metre	
Leeson Allsealed 225gsm Reinforcing Mat	225 grams per square metre	
Leeson Allsealed Top Coat (PU5574)	1.75 litre per square metre (Applied in two coats)	

Warranty

- A warranty for a project can be issued for a project, for this to be processed the following information is required:
- Leeson Polyurethanes needs to be informed in advance of a project that a warranty is intended for. Details of the project need to be submitted for prior approval and a Project Survey Report completed.
- A system proposal for the project will then be issued.
- As the project is ongoing, a Allsealed Application Day Sheet (see page 13 and 14) must be completed for each day of the installation together with photos of the installation before, during and after.
- The Allsealed Application Day Sheets must be submitted to Leeson Polyurethanes upon completion. Leeson Polyurethanes will review them, and a site visit may be required. [i.e. a warranty won't be issued next day after the Allsealed Application Day Sheets]





- A Warranty form containing the project details must be signed by the installer, owner and then the manufacturer (Leeson Polyurethanes).
- If all the information is provided as required Leeson Polyurethanes will issue a warranty.

Surface Preparation

The roof substrate should be fully prepared before application of the Allsealed system:

- Dirt build-up and all loose coatings/ material should be removed by scraping back to a sound edge and brushing with a stiff bristled brush.
- Clean the surface of any remaining dirt and debris, preferably by suitable high pressure water jetting
- If exposed to moss and lichen, then treat with fungicidal wash and allow to dry in accordance with manufacturer's instructions
- Adhesion of the existing coating system should be checked, and all defective coating removed back to a firm edge.
- Blisters in asphalt should be cut open exposing the surface and allow to dry before rebuilding with cementitious mortar. Badly degraded asphalt should be removed.
- Blisters in roofing felt should be star cut and allow to dry before re-bonding to the surface. Weak and degraded felt should be replaced.
- In all instances, any silicone or silicone sealants should not be treated with any Liquid Roofing System. All silicone must be removed prior to the application and re-applied if necessary, on completion of works.
- All Surfaces should now be solvent cleaned to remove any grease and soap residues then power washed and rinsed to remove all residual dirt and other contamination then allowed to dry.

Leeson Allsealed is to be applied directly to clean, dry felt. If a roof has existing failed PVC/TPO or other membrane, then we recommend the following as an alternative to removing the old membrane:

- Remove the existing metal fascia and trim back any membrane to a firmly adhered edge
- Check the whole of the flat roof area for any lifted or water filled blisters within the membrane roof area and star cut to allow any water trapped within to be drained off and wiped dry
- Any failed loose membrane should be removed back to a soundly adhered edge and star cut blisters should now be replaced so the roof area is not wrinkled.
- Mechanically fix in place treated 9mm marine ply board all over the roof area being
- Cut out the drain profile into the ply to keep the existing drain operational if it is on the roof area being treated
- Apply a single layer felt over the whole of the marine ply board roof and mechanically fix in place, making sure you have a 10cm overlap on the adjoining felt as it is laid in place.
- Take the felt right over the drain area and star cut it into place then using a Stanley knife trim off to allow the felt to drop into the drainage area but not obstruct it.
- Sweep off any loose aggregate to keep the surface area clean and free of any debris.
- You have now created your vapour control layer for the roof area, and it is waterproofed in case of inclement weather conditions.

For concrete substrates, any loose or broken concrete should be removed and if required, surfaces made good using a polymer modified cementitious screed in accordance with the manufacturer's instructions.

Application Conditions

The advised application conditions for the Leeson Allsealed system when laid is:

- In dry conditions
- Within the temperature range of 10°C 35°C
- Within the relative humidity range of 30% 85%.
- 3°C and above the determined dew point



Suitable measurement equipment should be available on site to measure the temperature and relative humidity. From these recorded values the dew point should then be determined using to table provided (see page 15).

Priming the surface

Once the application surface has been prepared, the surface should be primed if required with **LeesonPrime PU3922**

Substrate	Leeson Allsealed Waterproofing System (PU5558/PU5574)	
Asphalt	None required	
Asbestos – Good	PU Primer PU3922	
Asbestos – Aged/Dried	PU Primer PU3922	
Brick	None required	
Bitumen	None required	
Concrete – Dense	None required	
Concrete – Porous	PU Primer PU3922	
Felt	None required	
Insulation Boards Ply Faced	PU Primer PU3922	
Previously Painted	PU Primer PU3922	
Single ply	PU Primer PU3922	

Treatment of joints, upstands and gutter areas

Leeson Allsealed Embedment Coat (PU5558) is a single component high solids product and is supplied ready for use.

- Leeson Allsealed Embedment Coat (PU5558) should be applied using a good quality brush or medium pile rollers, with rollers being preferred for large areas at a nominal rate of 1.0 litre per square metre.
- All upstands, movement cracks and expansion joints should first be covered with Bridging Tape, the tape will take up any movement leaving the **Leeson Allsealed Waterproofing System** unaffected.
- The protective backing should be removed from the Bridging Tape and the tape should then be laid over the joints, backing side down, and pressed firmly onto the surface with care being taken to ensure the edges of the tape are pressed flush with the surface.
- The Leeson Allsealed 225gsm Reinforcing Mat should now be used as a reinforcement membrane over treated movement joints together with all angle joints with protrusions and upstands.



- Using a combination of mat and embedment coat place some 225gsm emulsion bound chopped strand mat over the drain area and using a Stanley knife cut the mat into a star and fold down into the drain to make a watertight seal around the drain area.
- it is not normally necessary to reinforce felt overlap joints unless there is a doubt about the integrity of the overlap.

Application of the Leeson Allsealed EC Embedment Coat (PU5558) with 225gsm reinforcement mat

The Leeson Allsealed Embedment Coat (PU5558) should be applied to the whole area to be treated using a good quality brush or roller at a nominal rate of 1.0 litre per square metre in conjunction with Leeson Allsealed 225gsm Reinforcing Mat embedded into the entire coated surface area:

- Mask off the trim area to keep a straight edge. Remove the masking tape once the coating has been applied and not allow it to dry otherwise you will not be able to get the tape off.
- Apply an initial coat of the Leeson Allsealed Embedment Coat (PU5558) and the apply the Leeson Allsealed 225gsm Reinforcing Mat on to the coating. Apply the remaining quantity of the Leeson Allsealed Embedment Coat (PU5558) to achieve the application rate of 1.0 litre per square metre.
- Ensure that wrinkles and folds in the matting are taken out and that the matting is completely encapsulated so that no fibres are showing through.
- Overlap the mat by minimum 2 cm. Take the mat and coating over the edge of the roof and down to where the removed trim was.
- Allow the system to dry overnight.

Application of the Leeson Allsealed Top Coat (PU5574)

The **Leeson Allsealed Top Coat (PU5574)** should be applied to the whole area to be treated using a good quality brush or roller at a nominal rate determined by the desired protection life, between 0.75 litre per square metre and 1.75 litre per square metre:

- Prior to application of the Leeson Allsealed Top Coat (PU5574), the Leeson Allsealed Embedment Coating (PU5558) must be dry and free from contamination.
- Inspect the embedment coating for any obvious pin holing or misses before applying a final coat and make appropriate repairs.
- Any areas not covered should be cleaned, dried and Leeson Allsealed Embedment Coating (PU5558) reapplied.
- Once the surface is fully covered and dry, remove any loose fibres of reinforcement mat with scissors or light sanding.
- Apply masking tape to the trim edge to keep a neat finish and remove the tape before the coating dries.
- Leeson Allsealed Top Coat (PU5574) should be applied to give a uniform even coating completely obliterating the embedment coat at a coverage rate of 0.75 litre per square metre to 0.75 litre per square metre on smooth surfaces, Further coatings may be required for longer protection life systems.
- Apply by brush or roller with roller being preferred for large applications.
- If any slip resistance is required, then an extra coat of Leeson Allsealed Top Coat (PU5574) can be applied and an aggregate broadcast and back-rolled into this finish coating as necessary.
 Leeson Allsealed Top Coat (PU5574) should be applied to the surface with a 0.8-1mm aggregate then broadcast over at a rate of 0.75Kg/m², whilst the Leeson Allsealed UV PU5574 is still wet.
- For high wear applications, once dried, a further coat of **Leeson Allsealed Top Coat (PU5574)** in either mid or dark grey should be applied as above. This coat will be used as a sacrificial coating to identify normal wear through of the coating to allow for a further topcoat finish as and when required.

(A bond for life)



Typical Drying Times

The following tables are given as practical guide for drying and overcoating times. The times stated are for an open area with a throughput of air movement:

Dry Time at 20° C (68° F)	Leeson Allsealed Embedment Coat (PU5558)	Leeson Allsealed Seal Coat (PU5574)
Touch Dry (Waterproof)	2 Hours	2 Hours
Hard Dry for Overcoating	6 – 8 Hours	6 – 8 Hours
Maximum Overcoating Time	Indefinite*	Indefinite*
Dry Time at 10º C (50º F)		
Touch Dry (Waterproof)	3 Hours	3 Hours
Hard Dry for Overcoating	8 - 10 Hours	8 - 10 Hours
Maximum Overcoating Time	Indefinite*	Indefinite*
Full Chemical Cure	10 Days	10 Days

*Surfaces must be clean, dry and free from contamination.

Confirmation of Waterproofing Performance

To confirm that the final installation is fully waterproof a flood test should be performed.

- Once the system is fully cured seal any drainage leading off of the application area
- fill with water until a 5mm layer is achieved across the surface of the application area.
- After 30 minutes the depth of water should be unchanged, confirming that the Leeson Allsealed has been applied to give a waterproof finish.

This is especially important if more work is to be done on the roof after the installation of Leeson Allsealed.



15 to 25 Year Pitched Roof System

Application Levels

The application quantity for Leeson Allsealed is dependent on the required protection life:

Material	Leeson Allsealed Waterproofing System 15 Year Protection Life
LeesonPrime PU3922 (If required)	0.125 litre per square metre
Leeson Allsealed Embedment Coat (PU5558)	0.5 litre per square metre
Leeson Allsealed 225gsm Reinforcing Mat (required only for local reinforcement)	225 grams per square metre
Leeson Allsealed Top Coat (PU5574)	0.5 litre per square metre

Material	Leeson Allsealed Waterproofing System 20 Year Protection Life	
LeesonPrime PU3922 (If required)	0.125 litre per square metre	
Leeson Allsealed Embedment Coat (PU5558)	0.75 litre per square metre	
Leeson Allsealed 225gsm Reinforcing Mat (required only for local reinforcement)	225 grams per square metre	
Leeson Allsealed Top Coat (PU5574)	0.5 litre per square metre	

Warranty

A warranty for a project can be issued for a project, for this to be processed the following information is required:

- Leeson Polyurethanes needs to be informed in advance of a project that a warranty is intended for. Details of the project need to be submitted for prior approval and a Project Survey Report completed.
- A system proposal for the project will then be issued.
- As the project is ongoing, a Allsealed Application Day Sheet (see page 13 and 14) must be completed for each day of the installation together with photos of the installation before, during and after.
- The Allsealed Application Day Sheets must be submitted to Leeson Polyurethanes upon completion. Leeson Polyurethanes will review them, and a site visit may be required. [I.e. a warranty won't be issued next day after the Allsealed Application Day Sheets]
- A Warranty form containing the project details must be signed by the installer, owner and then the manufacturer (Leeson Polyurethanes).
- If all the information is provided as required Leeson Polyurethanes will issue a warranty.

Surface Preparation

The roof substrate should be fully prepared before application of the Allsealed system:

- Dirt build-up and all loose coatings/ material should be removed by scraping back to a sound edge and brushing with a stiff bristled brush.
- Clean the surface of any remaining dirt and debris, preferably by suitable high pressure water jetting
- If exposed to moss and lichen, then treat with fungicidal wash and allow to dry in accordance with manufacturer's instructions



- Adhesion of the existing coating system should be checked, and all defective coating removed back to a firm edge.
- Blisters in asphalt should be cut open exposing the surface and allow to dry before rebuilding with cementitious mortar. Badly degraded asphalt should be removed.
- Blisters in roofing felt should be star cut and allow to dry before re-bonding to the surface. Weak and degraded felt should be replaced.
- In all instances, any silicone or silicone sealants should not be treated with any Liquid Roofing System. All silicone must be removed prior to the application and re-applied if necessary, on completion of works.
- All Surfaces should now be solvent cleaned to remove any grease and soap residues then power washed and rinsed to remove all residual dirt and other contamination then allowed to dry.

Leeson Allsealed is to be applied directly to clean, dry felt. If a roof has existing failed PVC/TPO or other membrane, then we recommend the following as an alternative to removing the old membrane:

- Remove the existing metal fascia and trim back any membrane to a firmly adhered edge
- Check the whole of the flat roof area for any lifted or water filled blisters within the membrane roof area and star cut to allow any water trapped within to be drained off and wiped dry
- Any failed loose membrane should be removed back to a soundly adhered edge and star cut blisters should now be replaced so the roof area is not wrinkled.
- Mechanically fix in place treated 9mm marine ply board all over the roof area being
- Cut out the drain profile into the ply to keep the existing drain operational if it is on the roof area being treated
- Apply a single layer felt over the whole of the marine ply board roof and mechanically fix in place, making sure you have a 10cm overlap on the adjoining felt as it is laid in place.
- Take the felt right over the drain area and star cut it into place then using a Stanley knife trim off to allow the felt to drop into the drainage area but not obstruct it.
- Sweep off any loose aggregate to keep the surface area clean and free of any debris.
- You have now created your vapour control layer for the roof area, and it is waterproofed in case of inclement weather conditions.

For concrete substrates, any loose or broken concrete should be removed and if required, surfaces made good using a polymer modified cementitious screed in accordance with the manufacturer's instructions.

Application Conditions

The advised application conditions for the Leeson Allsealed system when laid is:

- In dry conditions
- Within the temperature range of 10°C 35°C
- Within the relative humidity range of 30% 85%.
- 3°C and above the determined dew point

Suitable measurement equipment should be available on site to measure the temperature and relative humidity. From these recorded values the dew point should then be determined using to table provided (see page 15).

(A bond for life)



Priming the surface

Once the application surface has been prepared, the surface should be primed if required with **LeesonPrime PU3922**

Substrate	Leeson Allsealed Waterproofing System (EC PU5558/UV PU5574)	
Asphalt	None required	
Asbestos – Good	PU Primer PU3922	
Asbestos – Aged/Dried	PU Primer PU3922	
Brick	None required	
Bitumen	None required	
Concrete – Dense	None required	
Concrete – Porous	PU Primer PU3922	
Felt	None required	
Insulation Boards Ply Faced	PU Primer PU3922	
Previously Painted	PU Primer PU3922	
Single ply	PU Primer PU3922	

Treatment of joints, upstands and gutter areas

Leeson Allsealed Embedment Coat (PU5558) is a single component high solids product and is supplied ready for use.

- Leeson Allsealed Embedment Coat (PU5558) should be applied using a good quality brush or medium pile rollers, with rollers being preferred for large areas at a nominal rate of 1.0 litre per square metre.
- All upstands, movement cracks and expansion joints should first be covered with Bridging Tape, the tape will take up any movement leaving the **Leeson Allsealed Waterproofing System** unaffected.
- The protective backing should be removed from the Bridging Tape and the tape should then be laid over the joints, backing side down, and pressed firmly onto the surface with care being taken to ensure the edges of the tape are pressed flush with the surface.
- The **Leeson Allsealed 225gsm Reinforcing Mat** should now be used as a reinforcement membrane over treated movement joints together with all angle joints with protrusions and upstands.
- Using a combination of mat and embedment coat place some 225gsm emulsion bound chopped strand mat over the drain area and using a Stanley knife cut the mat into a star and fold down into the drain to make a watertight seal around the drain area.
- it is not normally necessary to reinforce felt overlap joints unless there is a doubt about the integrity of the overlap.



Application of the Leeson Allsealed Embedment Coat (PU5558)

The **Leeson Allsealed Embedment Coat (PU5558)** should be applied to the whole area to be treated using a good quality brush or roller at a nominal rate of 0.5 litre per square metre to 0.75 litre per square metre:

- Mask off the trim area to keep a straight edge. Remove the masking tape once the coating has been applied and not allow it to dry otherwise you will not be able to get the tape off.
- Apply the Leeson Allsealed Embedment Coat (PU5558) with a brush or roller to achieve the required application rate.
- Allow the system to dry overnight.

Application of the Leeson Allsealed Topcoat (PU5574)

The **Leeson Allsealed Top Coat (PU5574)** should be applied to the whole area to be treated using a good quality brush or roller at a nominal rate of 0.5 litre per square metre:

- Prior to application of the Leeson Allsealed Top Coat (PU5574), the Leeson Allsealed Embedment Coating (PU5558) must be dry and free from contamination.
- Inspect the embedment coating for any obvious pin holing or misses before applying a final coat and make appropriate repairs.
- Any areas not covered should be cleaned, dried and Leeson Allsealed Embedment Coating (PU5558) reapplied.
- Once the surface is fully covered and dry, remove any loose fibres of reinforcement mat with scissors or light sanding.
- Apply masking tape to the trim edge to keep a neat finish and remove the tape before the coating dries.
- Leeson Allsealed Top Coat (PU5574) should be applied to give a uniform even coating completely obliterating the embedment coat at a coverage rate of 0.75 litre per square metre to 0.75 litre per square metre on smooth surfaces, Further coatings may be required for longer protection life systems.
- Apply by brush or roller with roller being preferred for large applications.
- If any slip resistance is required, then an extra coat of Leeson Allsealed Top Coat (PU5574) can be applied and an aggregate broadcast and back-rolled into this finish coating as necessary.
 Leeson Allsealed Top Coat (PU5574) should be applied to the surface with a 0.8-1mm aggregate then broadcast over at a rate of 0.75Kg/m², whilst the Leeson Allsealed UV PU5574 is still wet.
- For high wear applications, once dried, a further coat of **Leeson Allsealed Top Coat (PU5574)** in either mid or dark grey should be applied as above. This coat will be used as a sacrificial coating to identify normal wear through of the coating to allow for a further topcoat finish as and when required.



Typical Drying Times

The following tables are given as practical guide for drying and overcoating times. The times stated are for an open area with a throughput of air movement:

Dry Time at 20º C (68º F)	Leeson Allsealed Embedment Coat (PU5558)	Leeson Allsealed Seal Coat (PU5574)
Touch Dry (Waterproof)	2 Hours	2 Hours
Hard Dry for Overcoating	6 – 8 Hours	6 – 8 Hours
Maximum Overcoating Time	Indefinite*	Indefinite*
Dry Time at 10° C (50° F)		
Touch Dry (Waterproof)	3 Hours	3 Hours
Hard Dry for Overcoating	8 - 10 Hours	8 - 10 Hours
Maximum Overcoating Time	Indefinite*	Indefinite*
Full Chemical Cure	10 Days	10 Days

*Surfaces must be clean, dry and free from contamination.



Allsealed Application Day Sheet

This day sheet is to be completed for each day of installation and for each component being laid.

Site Information:	
Date	
Customer	
Site Reference & address	
Application length (m)	
Application width (m)	
Application area (m ²)	

Site Conditions:	Initials
Subbase construction	
Is the subbase approved	
Is any remedial work required	
Is drying or cleaning required	
Is priming required	

Primer Application:			Initials
Product number			
Batch Numbers			
Number of kits Used			
Application Time	Start:	End:	
Air Temperature (°C)	Start:	End:	
Ground Temperature (°C)	Start:	End:	
Relative Humidity (%RH)	Start:	End:	

Allsealed – Embedment Coat (PU5558) Application:								
Tape de-bonding strips applied as required								
Detailing complete before EC application								
System to be installed	15 year	20 year	25 year					
Chopped Strand to be used	gsm -	·						
Batch Numbers								
Number of kits Used								
PU5558 coverage (L/sqm)								
Application Time	Start:	Er	ıd:					
Air Temperature (°C)	Start:	Er	ıd:					
Ground Temperature (°C)	Start:	Er	ıd:					
Relative Humidity (%RH)	Start:	Er	ıd:					



Allsealed – Top Coat (PU5574) Application:							
EC coat fully cured before application of UV Coat							
Check Chopped Strand Matt Fully Sealer (Seal any pin holes and remove any strands before EC coat).							
Batch Numbers							
Number of kits Used							
PU5574 coverage (L/sqm)							
Application Time	Start:	End:					
Air Temperature (°C)	Start:	End:					
Ground Temperature (°C)	Start:	End:					
Relative Humidity (%RH)	Start:	End:					
Fill test performed (once surface is cured, seal drains leading from the roof and fill with 5mm of water, hold on the surface for 30 minutes)							

Comments	
Supervisor Signature:	



DEW POINT CHART

Dew Point is the temperature at which condensations forms on a surface. 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 the Dew Point is reached.

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

Example: Read the air temperature in the left-hand column and the humidity at the top of the chart. If the air temperature of the site is 24° C and the relative humidity is 35%, the intersection of the two shows the dew point of the area to be 8°C. The surface temperature should be at least 3 degrees above that point, i.e. 11°C or above, to prevent water condensing on the application surface.