ENSTALL

MAINTENANCE – INSPECTION CHECKLIST

Based on the control items from the accompanying checklists the correct installation of the Enstall mounting system is determined (Enstall & NEN7250). Enstall has prepared this maintenance inspection report with checkpoints based on own knowledge and NEN7250:2021. Solar.

PREPARATION

Maintenance and inspection personnel are required to have the product manual and project plan readily available during their activities, to comply with the specific system requirements and adhere to the detailed project configurations.

SAFETY

When performing maintenance on pitched roof PV systems, it's crucial to adhere to safety guidelines as outlined in NEN 7250:2021.
Always wear appropriate personal safety equipment including fall protection and non-slip shoes. Before starting any work, check the condition of all permanent fall protection systems.
Ensure safe access to the PV system using stable ladders or scaffolding.
Maintenance personnel should be specifically trained in working at heights and familiar with the risks associated with PV systems.
Avoid maintenance activities during adverse weather conditions like rain or strong winds.
Always switch off the electrical supply to the PV system for safety and follow proper procedures when dealing with electrical systems.

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Contact information	
Customer Name	
Inspector Name	
Installer Name	
Installation Address	
Zip Code	
City/Country	
Date of inspection	

Enstall Projectplan in dossier?		Yes	No
Total cumulative capacity:			
Panel specifications:	Brand:		
	Type:		
	Capacity [Wp]:		
	Size LxBxH:		mm
	Panel amount:		KG
	Weight:		
	Panel datasheet present?	Yes	No

Number of fields:	Field	Number of panels	Capacity [Wp]	
	A			
	B			

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FLAT ROOF
FlatFix Fusion
Perform maintenance on all corner modules of each segment (4 clamps per panel).
Perform maintenance on all modules along every edge of each segment at least every 3 years (preferably every year), or after severe wind conditions (from Beaufort force 9).
If more than 5% defective screws are identified (screws spinning freely), then inspect all clamps of the project

General	
A.	Ensure that no leaves or other vegetation accumulate under the system. Remove immediately if necessary. Heavily accumulated leaves and/or vegetation can cause unwanted heat development which also does not contribute to the performance of your installation.
B.	The correct installation should correspond to the following parameters.

Are the panels properly secured?	Yes	No	If no, addition
All middle and end clamps are present and tightened with a torque screw.			
The panels are well positioned in the inner corners (stop side) of the low and between the ribs of the high base element.			

Are the roof supports properly secured?	Yes	No	If no, addition
Every low base element has a roof support			
Every roof support adapter has a roof support.			
Every high base element with ballast bracket has two roof supports, and without ballast bracket has one roof support.			
Number of counted roof supports ≥ roof supports on construction plan.			
Has the system shifted? If so, by how much?			

Are the wind deflectors properly secured?	Yes	No	If no, addition
Side deflectors are fixed with 2 screws			
Rear wind deflectors are fixed with screws both at the bottom and the top, both on the left and the right.			
In a dual configuration, a stabilizer is mounted everywhere.			
The stabilizer is well screwed tight (so that the EPDM under the ring of the screw expands).			
Has the system shifted? If so, by how much?			

Are there indications for more in-depth investigation?	Yes	No	If no, addition
The roof supports have left an imprint on the roofing material (the roof support appears to have shifted)			
Is there degradation of the roofing material (e.g., damage, unusual discoloration, etc.)?			
Is anything attached or is there an unusual situation that could affect the Enstall system?			
Are there any other visible damages to the Enstall system?			
Has the system shifted? If so, by how much?			

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PITCHED ROOF	
General	
A.	Check the overall condition of the roof, including the tiles or other coverings, to ensure there is no damage or wear that could affect the integrity of the installation.
B.	Ensure that no leaves or other vegetation accumulate under the system. Remove immediately if necessary. Heavily accumulated leaves and/or vegetation can cause unwanted heat development which also does not contribute to the performance of your installation.
C.	Maintenance inspection should take place at least once every year, or after extreme weather conditions.
D.	Verify if the solar array has been positioned as per the instructions in the project plan.

System inspection			
Structural integrity:	Yes	No	If no, addition
Inspect the overall structural integrity of the solar array looking for any signs of sagging, misalignment, dents, cracks, or loose components.			
Inspect each type of roof connection whether it be roof hooks, hanger bolts, anchors or clamping mechanisms to ensure they are correctly aligned			
Look for any unauthorized modifications or repairs to the mounting system which might affect its performance or safety.			
Verify that all sealants or flashing used are intact and providing adequate water-proofing.			

Solar panels:	Yes	No	If no, addition
Inspect the panels for damage such as (micro-)cracks or delamination.			
Ensure that all cables are neatly arranged and secured against movement or damage from weather conditions.			
Check the tightening torque of all mounting clamps (torque according to the manual).			

Mounting system:	Yes	No	If no, addition
Check the alignment of all mounting rails to ensure they are straight and parallel. Misalignment can indicate movement or settling.			
Inspect all bolts, screws, and fasteners for signs of loosening, corrosion, or wear. Tighten or replace as necessary.			
Check if the end caps are properly in place.			
(Situational) Verify the continuity of the grounding system throughout the mounting structure.			

Are there indications for more in-depth investigation?	Yes	No	If no, addition
Any signs of water infiltration around mounts and seals which could suggest compromised waterproofing. (Persistent dampness or penetrating rust could warrant a closer look at potential water damage.)			
Degradation of the roofing material (e.g., damage, unusual discoloration, etc.)?			
Is anything attached or is there an unusual situation that could affect the mounting system?			
Listen for any creaking or popping sounds while on the roof. Such noises may point towards components that are shifting or under strain, necessitating further investigation.			

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Notes

Sign the document	
Company name	
Name	
Date	
Signature	