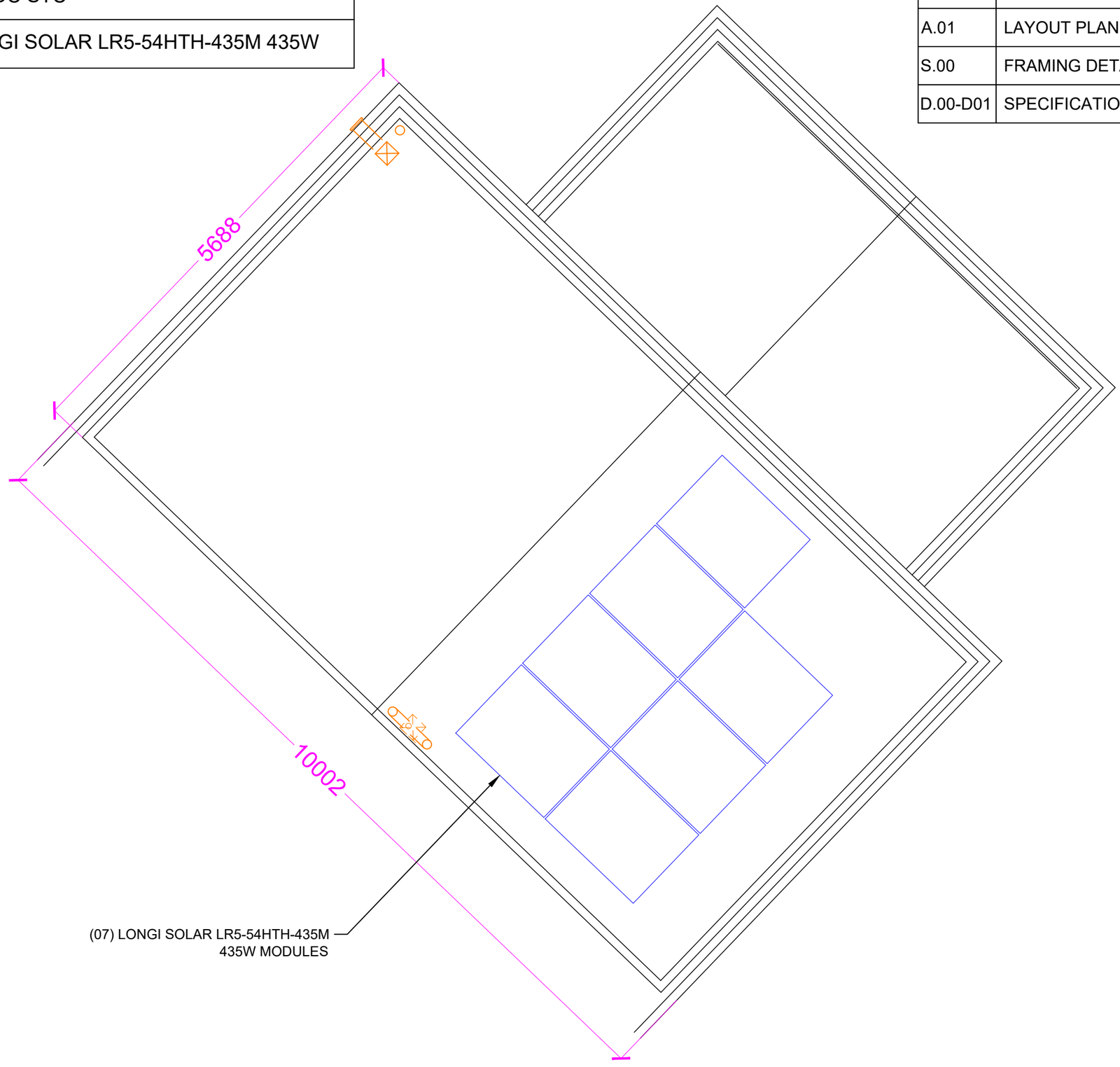
PROJECT DESCRIPTION:	
SYSTEM SIZE	3.05KW DC STC
MODULE TYPE	(07) LONGI SOLAR LR5-54HTH-435M 435W

INDEX SHEET	
A.00	SITE PLAN
A.01	LAYOUT PLAN
S.00	FRAMING DETAILS
D.00-D01	SPECIFICATION SHEETS



1 SITE PLAN
SCALE: 1:50

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ROCHESTER, KENT
ME2 4NP

PRO.DATE	16/09/2024
DESIGN BY	DR
CHECKED BY	JD

PROJECT NAME

WHITEHALL ROAD
(THE BAMBURGH PLUS)

SHEET NAME

SITE PLAN

SHEET SIZE

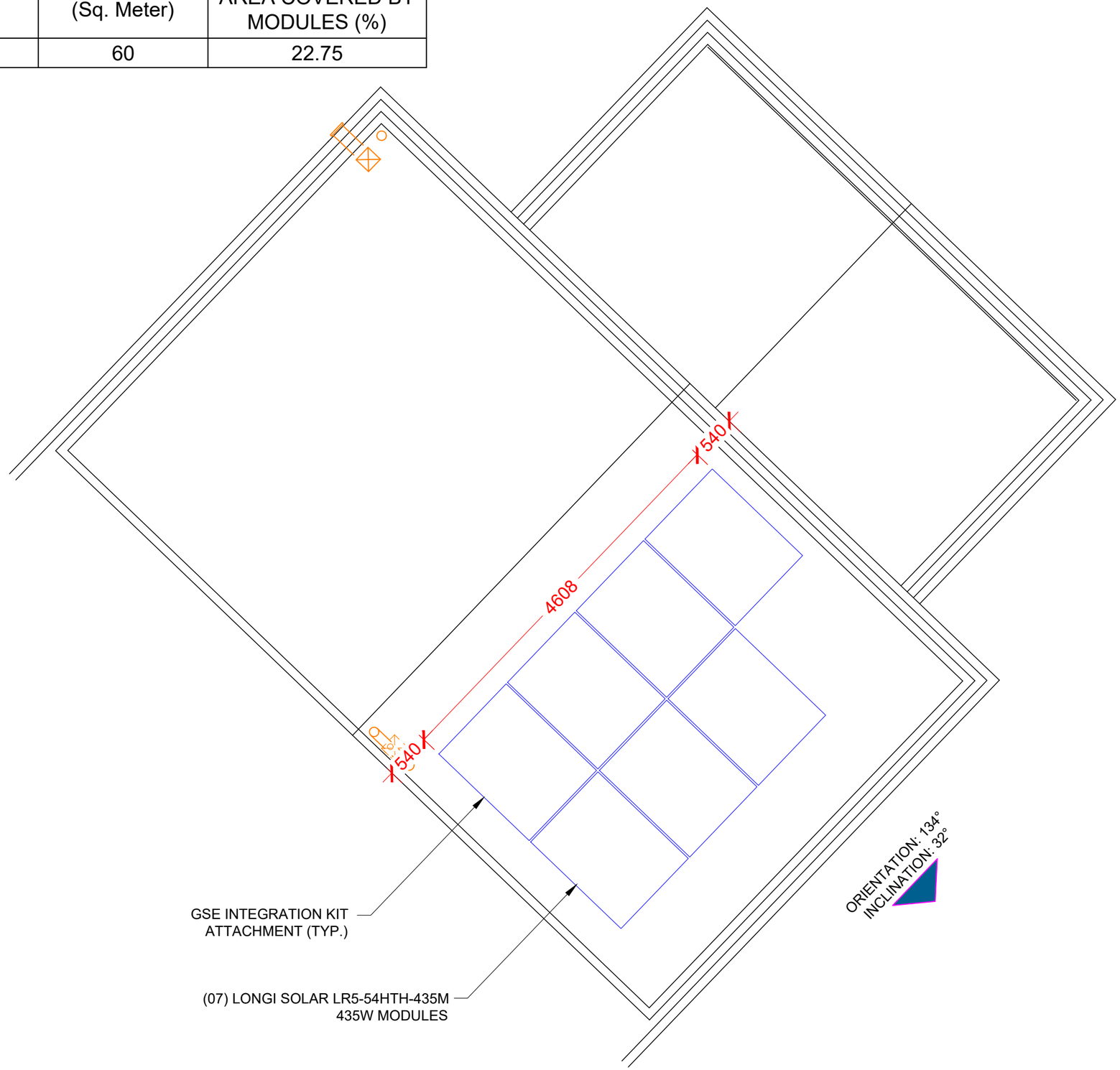
ANSI B
279 X 432

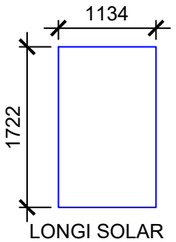
SHEET NUMBER

A.00

MODULES AREA & ROOF AREA CALC'S

# OF MODULES	MODULES AREA (Sq. Meter)	ROOF AREA (Sq. Meter)	ROOF AREA COVERED BY MODULES (%)
07	13.65	60	22.75





LONGI SOLAR
LR5-54HTH-435M
435W MODULE

1 LAYOUT PLAN
SCALE: 1:50

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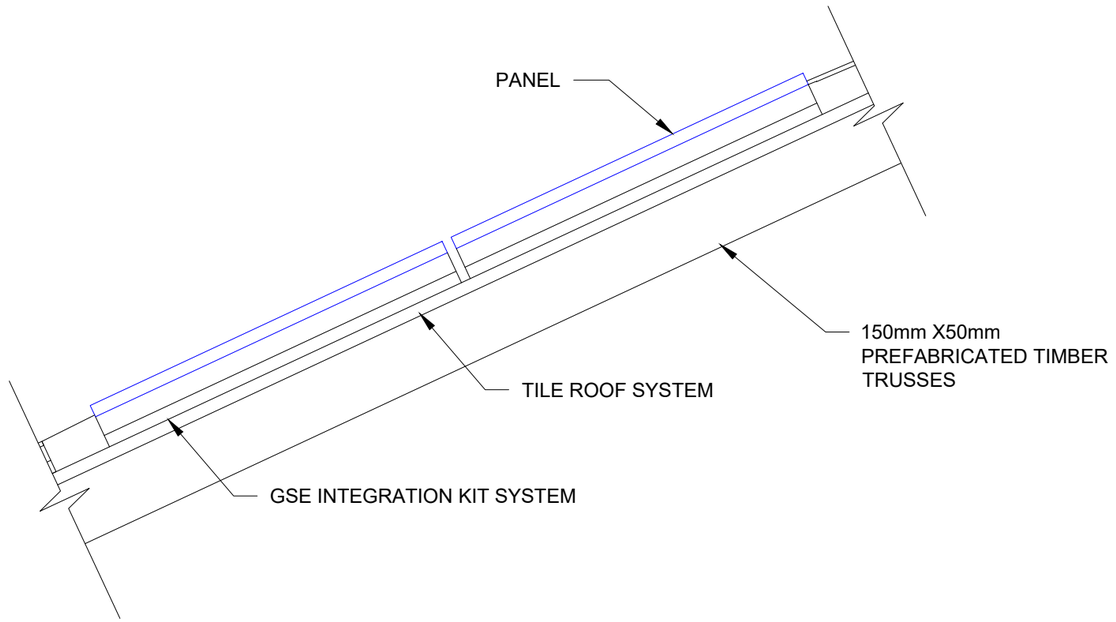
LAYOUT PLAN

SHEET SIZE

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SHEET NUMBER

A.01



1 ATTACHMENT DETAILS

SCALE: NTS









2 ENLARGED VIEW

SCALE: NTS

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FRAMING
DETAILS

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SHEET NUMBER

S.00

Hi-MO 6
Scientists

LR5-54HTH
435~450M

- Suitable for distributed projects
- Excellent outdoor power generation performance
- High module quality ensures long-term reliability



25-year Warranty for Materials and Processing

25-year Warranty for Extra Linear Power Output

Complete System and Product Certifications

IEC 61215, IEC 61730, UL 61730
ISO9001:2015: ISO Quality Management System
ISO14001: 2015: ISO Environment Management System
ISO45001: 2018: Occupational Health and Safety
IEC62941: Guideline for module design qualification and type approval

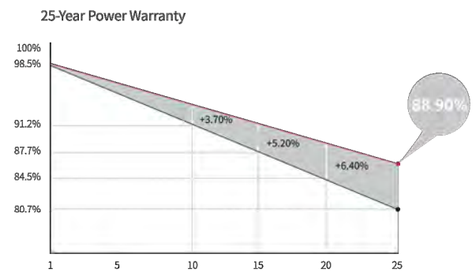
LONGi

Hi-MO 6

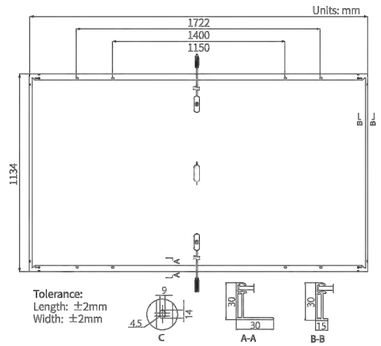
LR5-54HTH 435~450M

23.0%	0~3%	<1.5%	0.40%
MAX MODULE EFFICIENCY	POWER TOLERANCE	FIRST YEAR POWER DEGRADATION	YEAR 2-25 POWER DEGRADATION

Additional Value







Mechanical Parameters

Cell Orientation	108 (6×18)
Junction Box	IP68, three diodes
Output Cable	4mm², ±1200mm length can be customized
Glass	Single glass, 3.2mm coated tempered glass
Frame	Anodized aluminum alloy frame
Weight	20.8kg
Dimension	1722×1134×30mm
Packaging	36pcs per pallet / 216pcs per 20' GP / 936pcs per 40' HC

Electrical Characteristics

STC : AM1.5 1000W/m² 25°C NOCT : AM1.5 800W/m² 20°C 1m/s Test uncertainty for Pmax: ±3%

Module Type	LR5-54HTH-435M		LR5-54HTH-440M		LR5-54HTH-445M		LR5-54HTH-450M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	435	325	440	329	445	332	450	336
Open Circuit Voltage (Voc/V)	39.33	36.93	39.53	37.11	39.73	37.30	39.93	37.49
Short Circuit Current (Isc/A)	14.22	11.49	14.30	11.55	14.37	11.61	14.45	11.67
Voltage at Maximum Power (Vmp/V)	33.04	30.15	33.24	30.33	33.44	30.51	33.64	30.70
Current at Maximum Power (Imp/A)	13.17	10.78	13.24	10.85	13.31	10.90	13.38	10.95
Module Efficiency(%)	22.3		22.5		22.8		23.0	

Operating Parameters

Operational Temperature	-40°C ~ +85°C
Power Output Tolerance	0 ~ 3%
Voc and Isc Tolerance	±3%
Maximum System Voltage	DC1500V (IEC/UL)
Maximum Series Fuse Rating	25A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Fire Rating	UL type 1 or 2 IEC Class C

Mechanical Loading

Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

Temperature Ratings (STC)

Temperature Coefficient of Isc	+0.050%/°C
Temperature Coefficient of Voc	-0.230%/°C
Temperature Coefficient of Pmax	-0.290%/°C

LONGi

No.8369 Shangyuan Road, Xi'an Economic And Technological Development Zone, Xi'an, Shaanxi, China.
Web: www.longi.com

Specifications included in this datasheet are subject to change without notice. LONGi reserves the right of final interpretation. (20221020DraftV03) DG

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SHEET NAME
SPECIFICATION SHEET

SHEET SIZE
ANSI B
279 X 432

SHEET NUMBER
D.00

GROUPE SOLUTION ENERGIE

GSE INTEGRATION KIT

In-Roof Integrated PV system for traditional Photovoltaic Panels









"Fits 95% of the PV Modules on the Market"

Simple, Quick, Aesthetic, Lightweight, Waterproof and Inexpensive

Developed by installers for installers, the GSE Integration Kit offers sizeable advantages :

- Easy to install
- Quick to mount : installation time is very valuable to professional installers and we kept that in mind when designing our kit (a 3kW System installed in 3 hours)
- Lightweight and easy to transport
- Completely Waterproof : ensures a complete watertightness of the PV System
- Flexible : achieve any desired configuration type (landscape, portrait, U-Shape, Pyramid etc), on any roof type
- Shock Resistant
- Climate Resistant (from -20C to 100C)
- Fits most existing PV modules
- 100% Recyclable
- Inexpensive : GSE integration kit is to date the most cost efficient In-Roof PV System on the market, making it ideal for roof retrofits and new construction.

Exova BROOF T4

NEW MCS BBA CERTIFICATE BBA 0156

GROUPE SOLUTION ENERGIE

GSE INTEGRATION KIT

In-Roof Integrated PV system for traditional Photovoltaic Panels











Technical Specs

Available Sizes : (in mm)	From 1635 to 1680 / 982 to 993 (Portrait / Landscape) From 1635 to 1680 / 994 to 1002 (Portrait / Landscape) 1580 / 808 (Portrait / Landscape) 1575 / 1082 (Portrait / Landscape) 1559 / 1046 (Portrait / Landscape) 1575 / 1069 (Portrait / Landscape)
Color	SILVER / BLACK (100% Recyclable)
Material	PP – Aluminum – Stainless Steel (100% Recyclable)
Temperature Range	-20°C to 100°C (Vicat Softening Point: 148°C)
Slope	10° to 50°
Weight	2 to 3 kg / m²
Warranty	10 Years





Our Certifications

certisolis · cofrac ESSAIS · CSTB · SMABTP · ORIGINE FRANCE GARANTIE · PASS'INNOVATION VERT CSTB N°2013-221 · ETN

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