PHOTOVOLTAIC

GSE IN-ROOF SYSTEM™

In-Roof Integrated PV system for traditional Photovoltaic Panels

Simple, quick, aesthetic, lightweight, waterproof and inexpensive!

CERTIFICATIONS AND INSURANCE COVER

MCS CERTIFIED

BBA CERTIFICATE BBA 0156

AVIS TECHNIQUE CC FAT

MADE IN FRANCE

ETN ENQUETE DE TECHNIQUES NOUVELLES

CHUBB®

V 2.2

www.gseintegration.com

Contents

GSE Intégration

ABOUT US...

For more than 10 years, **GSE Intégration** has been developing an IN-ROOF mounting system that allows the construction of a solar roof with standard photovoltaic modules.

Founded in 2008, **GSE Intégration** has quickly established itself as one of the leading players in Europe for building integrated photovoltaic solutions and related energy saving solutions. **GSE Intégration's** business is to design and market innovative and distinctive patented photovoltaic and aerovoltaic solutions, systems specially designed to adapt to the needs of users and to meet new environmental regulations.

These solutions are compatible with all architectural choices and roofing styles and with all tiles and slates on the market in terms of waterproofing, integration and aesthetics.
GSE Intégration designs and manufactures its products in France.

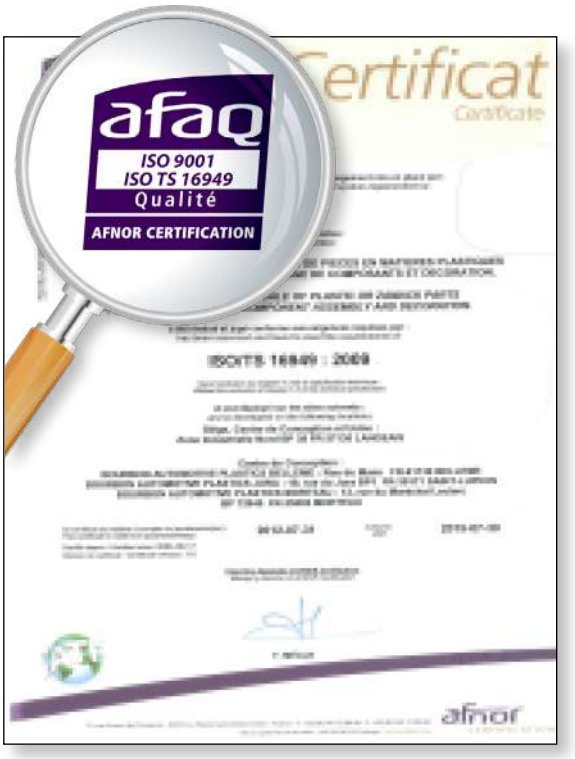
GSE INTÉGRATION KEY STATISTICS

Sales figures 2019	Number of employees	Distributor countries	Roofs covered with IN-ROOF
54 M€	38	30	4 500 000 m²

Certifications & Qualifications

ISO CERTIFICATIONS

GSE Intégration has selected only French companies for the sourcing of the manufacturing process, in order to have all the necessary certifications and qualifications:



PLATES GSE IN-ROOF

The GSE IN-ROOF plate production plants are located in France and are certified:
ISO TS 16949 et ISO 9001.

GSE IN-ROOF EDGE JOINERS AND MOUNTINGS

The GSE IN-ROOF edge joiner and mountings production plants are located in France and Italie and are certified: **ISO 9001.**

MATERIALS

POLYPROPYLENE PLATES

Polypropylène (PP): is a highly polyvalent polymer that is used as both thermo-plastic and fibre. It is very easily coloured and doesn't absorb water. It is much used for moulded automotive equipment (bumpers, dashboards, interior finishing), for garden furniture and also for manufacturing tanks.
Polypropylene is also used to manufacture food containers that can be machine washed, as it doesn't melt below 160°C. PP now has a very broad range of applications, as it is chemically stable, excellent for preserving hygiene, is not subject to corrosion and can even be machined.

ALUMINIUM ALLOY EDGE JOINERS

Aluminium alloy (AL): The main advantages of aluminium alloy are its light weight, its excellent resistance to corrosion, its flexibility (easy to work if necessary, for example it can easily be drilled, folded or cut, etc.), and it can be recycled.
Furthermore, black pre-lacquered aluminium alloy offers enhanced corrosion resistance in corrosive atmospheres and the coating is extremely durable when subjected to UV radiation.

STAINLESS MOUNTINGS

L'inox (IN): **Stainless steel** (IN): The raw material used for the GSE Intégration mounting system is stainless steel grade 304L C1000. Stainless steel 304L has great mechanical strength, is very light and offers excellent corrosion resistance (no surface treatment required).
In addition, stainless steel is electrically and chemically neutral in relation to most other roofing materials (no corrosion cell).
Compared with aluminium alloy, stainless steel also offers the advantage of not breaking when stressed beyond its elastic limit (it will distort before breaking), while aluminium alloy suddenly fails without prior warning.
Grade C1000 is even stronger than standard grade stainless steel.

Avis Technique CSTB

AVIS TECHNIQUE n°21/16-57_V4

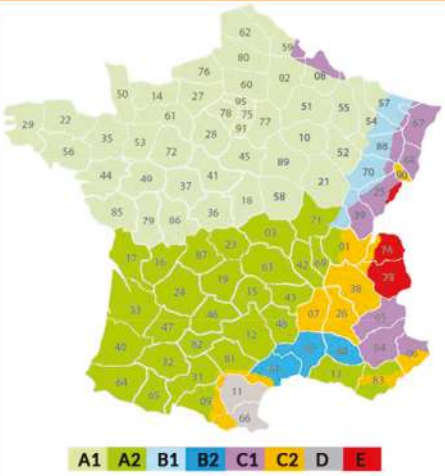
TECHNICAL ANALYSIS FROM THE CSTB

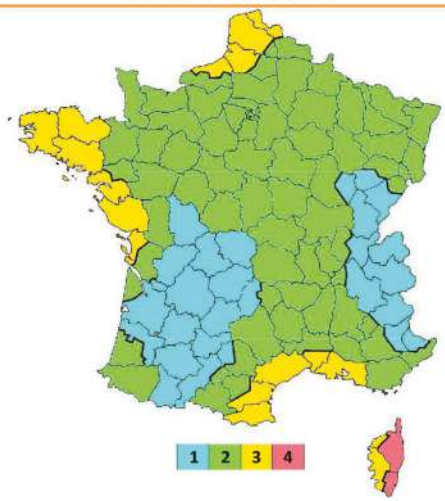
1/ SCOPE OF USE

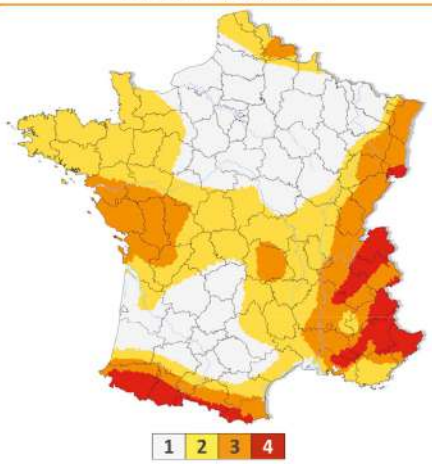
- Applicable in portrait format for roof pitches from 13.5° to 45° (24% to 100%)
- Suitable on center field of roofs with curved and interlocking tiles (Clay or concrete)

2/ CLIMATE STABILITY

NEIGE (Eurocode 1-3)	VENT (Eurocode 1-4)	SEISME (Eurocode 8, arrêté du 22/10/10 modifié)
Charge normale ≤ 1800 Pa Validité => Zone E	Charge normale ≤ 1000 - 1700 Pa Validité => Zone 4	Tout type de bâtiment Zone de sismicité 4







VALID FOR ALL THE EUROPEAN FRENCH TERRITORY

3/ WATERTIGHTNESS

"Owing to the global design, the installation conditions described in the technical file and the experience feedbacks, ***the watertightness of the system can be considered satisfactory****"*

4/ CONCLUSIONS OF THE "GROUPE SPECIALISE N° 21"

OVERALL ASSESSMENT :
The use of the process in the scope defined in the technical document has been favourably considered.

VALIDITY :
Until 30st September 2023

CC FAT AVIS TECHNIQUE

MCS 012 - BBA

CERTIFICAT NO: MCS BBA 0156

BBA TECHNICAL ANALYSIS

GSE INTÉGRATION system's components:
GSE INTÉGRATION plate
Wedges
Lateral flashings
EPDM Joint
Clamps

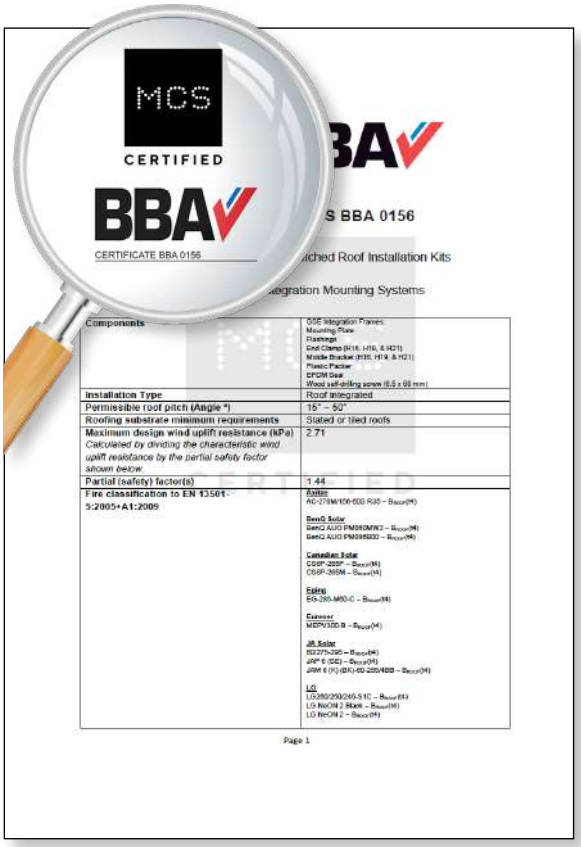
Type of installation:
Roof integration

Roof slope:
15° to 50°

Elements of covering:
Tiles or slates

Resistance to maximal wind uplift (kPa): 2,71
calculated by dividing the resistance characteristics to wind uplift by the partial indicated security's coefficient

Fire classification:
Broof T4



Videos of MCS012 tests are available on our Youtube channel

ETN Report Alpes Contrôles

ETN REPORT n° A27T2109 – FAVOURABLE OPINION

ALPES CONTRÔLES TECHNICAL ANALYSIS

1/ SCOPE OF USE

- Useable all over France in the **5 different** "wind zones"
- Suitable for all kind of structure
- Applicable for roof pitches from **12° à 50°** (21% to 119%)
- Available in **Portrait and Landscape**

2/ ROOF TYPES

- Suitable as a partial roofing for different kind of ventilated roof associated with small roofing elements, like tiles (flat, curved or interlocking) and slates
- Traditional wooden framework composed of purlins, rafters and battens, according to the building codes

3/ CLIMATE STABILITY

PORTRAIT AND LANDSCAPE		
Upward loads (Wind)	Extreme wind actions resistance (Pa) (1)	1860 Pa w/ 4 clamps 2400 Pa w/ 6 clamps
Downward loads (Snow)	Extreme snow loads resistance (Pa) (1)	5400 Pa

(1) Nota : Those values have been calculated without taking into account the resistance of the wooden structure that must be dimensioned according to the Eurocode.

Under these conditions, an ETN is awarded for the GSE IN-ROOF SYSTEM process.

FIRE EXPOSURE TESTS BROOF T1, T3, T4 APPROVED

The WarringtonFire laboratories based in Belgium and in England have validated the GSE INTÉGRATION system's fireproofing.
The system passed all the current tests according to the different necessary configurations for the French, Belgian, German, Dutch and English construction.

DETAILS OF THE DIFFERENT TESTS

1/ BROOF T1 : German, Dutch, and Belgian Standard

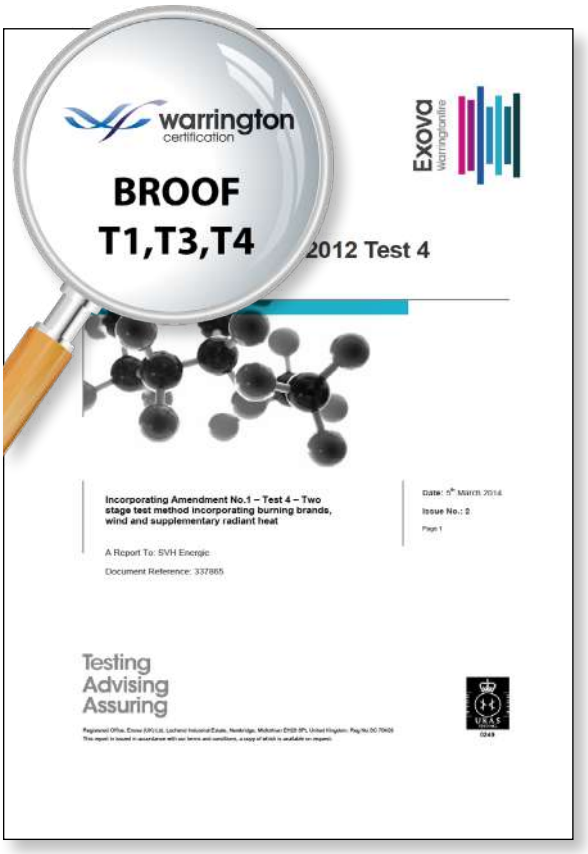
- 4 x models with different configurations
- Test time until the end of combustion of the firebrands, wood fibers , etc.
- Use of burning firebrands, ablaze and radiant heat wood fiber.

2/ BROOF T3 : French Standard

- 2 x models with different configurations
- 2 x 30 minutes of test
- Use of burning firebrands, radiant wind and heat
- Validation for 10° to 70° roof in accordance with the paragraph 11 "activity sector" of the testing protocol.

3/ BROOF T4 : English Standard

- 4 x models with different configurations
- 4 x 1 hour of test
- The fire did not get through the structure during the allotted time.



Videos of the fire exposure tests are available on our YouTube channel

CONCLUSION
The GSE Intégration system is therefore flame-retardant according to the DD CEN/TS 1187: 2012, Test 1, Test 3 et Test 4 standard.

CSTB Waterproofing analysis report

ANALYSIS OF WATERPROOFING AND WIND RESISTANCE OF GSE IN-ROOF SYSTEM

WATERPROOFING TESTS IN RAIN

CONCLUSIONS

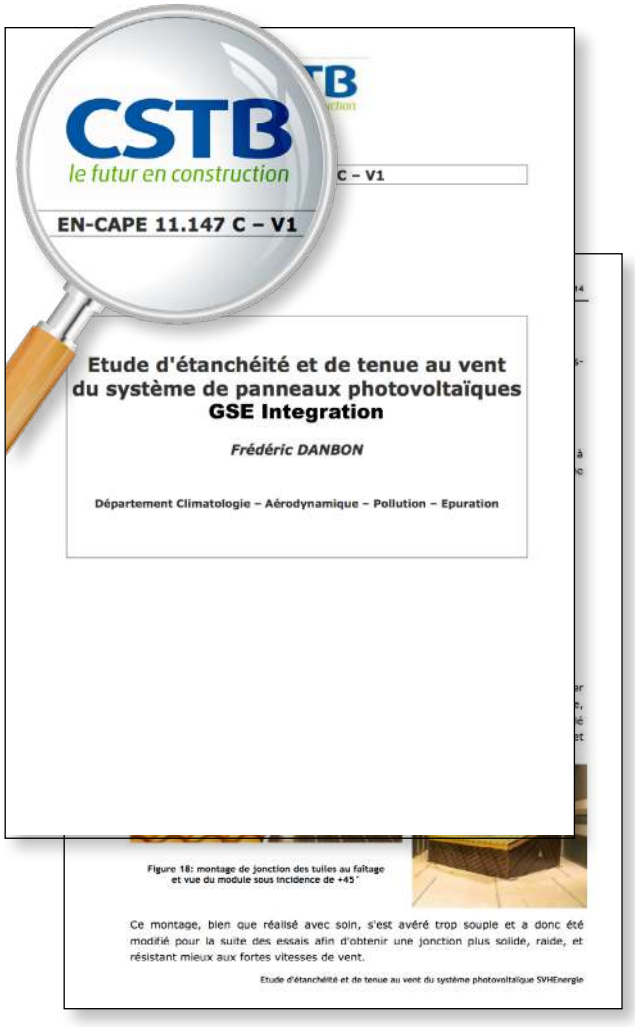
GSE IN-ROOF SYSTEM kit, with ZNshine Solar photovoltaic panels, was effectively waterproof under severe rain/wind conditions (rainfall 130 mm/h with a wind speed of 14 m/s) and a shallow roof slope.

TESTS OF REMOVAL BY WIND

CONCLUSIONS

The integration system GSE IN-ROOF, with photovoltaic panels, on a traditional GR13 tile roofing, was tested for waterproofing and for its resistance to strong winds.

The waterproofing tests, under a combination of wind and rain, confirmed that the integration system is effective. Waterproofing performance is summarised in the table below:



OVERVIEW OF WATERPROOFING TEST RESULTS

Full scale tests, conducted in a climatic blower system, on 2011, 2016 and 2019, confirmed the effectiveness of the GSE IN-ROOF SYSTEM under severe climatic conditions.

Type of Roofing	Slope length	Wind-rain intensity	Slope	Angle of incidence in relation to wind	Observations during test	Test result
GR13 Tile in baked clay	8.2 m	14 m/s 130 mm/h	12° (21%)	0°, + 30°, + 60°, - 30°, - 60°,	No leak if properly installed	Positive
Tile Volnay PV	8.2 m	14 m/s 130 mm/h	17° (31%)	0°, + 30°, + 60°, - 30°, - 60°,	No leak if properly installed	Positive

The videos of the wind and rain resistance tests are available on our Youtube channel

CSTB Ageing analysis report

ACCELERATED AGEING OF PHOTOVOLTAIC MODULE MOUNTING PANELS

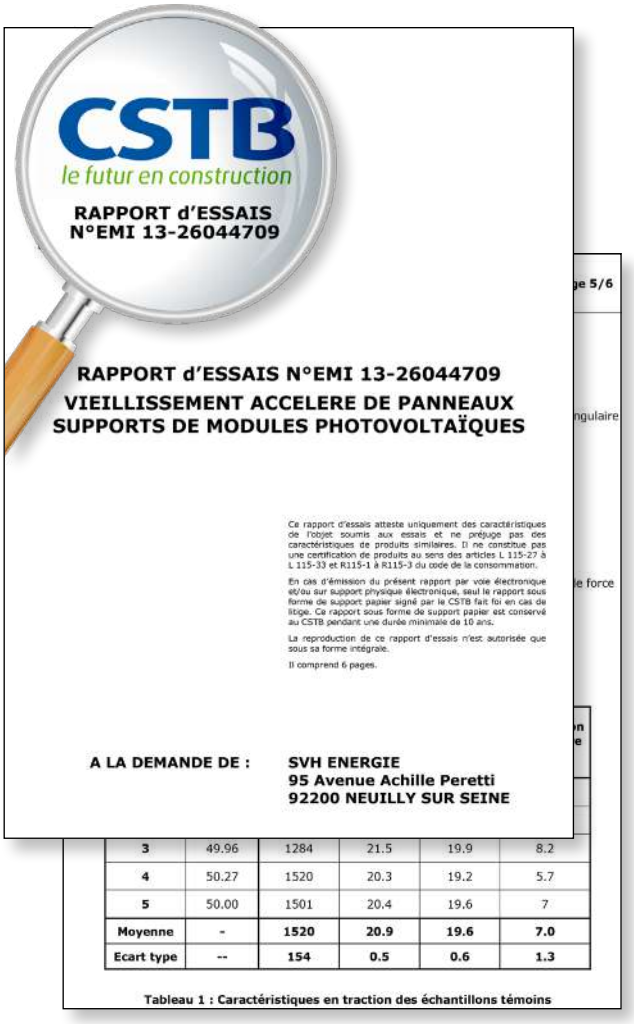
1/ ACCELERATED AGEING IN RELATION

Method of exposure to UV radiation

The accelerated ageing tests were conducted in compliance with standards NF EN ISO 4892-1 and 2 : "Exposure to a Xenon arc lamp light source", method A, cycle 1, under the following conditions :

- energy spectrum lighting: 0.51 W/m² at 340 nm, giving an overall energy spectrum lighting of 550 W/m² (wavelength: 290-800 nm),
- air temperature in chamber: 38°C ± 3°C,
- relative humidity (RH): 50% ± 10%,
- temperature on BST type black panel: 65°C ± 3°C,
- watering cycle :
  - watering : 18 mn ± 0.5 mn,
  - drying : 102 mn ± 0.5 mn,
- permanent lighting.

Exposure duration: 2000 hours.



2/ ACCELERATED AGEING IN STOVE

Method of climatic exposure

The climatic ageing tests were conducted under the following conditions :

- 10 cycles, as follows :
- 8 h at 50°C and 95% relative humidity
- Transition 1 h
- 16 h at –20°C
- Transition 1 h

3/ TENSILE STRENGTH CHARACTERISTICS

Test principle and conditions

Measurement of rupture force and extension of a rectangular test piece, drawn along its main axis at constant velocity.

Test conditions are defined by standard NF EN ISO 527-2 :

- Test piece geometry: type 1B (dumbbell).
- Test conditions: 23°C and RH 50%.
- Velocity for modulus computing: 2 mm/min

Test velocity is 30 mm/min.

SUMMARY OF TENSILE STRENGTH AFTER AGEING TEST RESULTS

Results were computed in accordance with standard NF EN ISO 527-1. The tests confirmed that elasticity E_t (MPa), maximum acceptable loading δ_M (MPa), rupture load δ_B (MPa) and distortion capacity before rupture ε_B (%) remained unchanged after the various treatment cycles defined above.

CSTB Report - Ageing analysis

AGEING ANALYSIS IN REAL CONDITIONS

1/ CHARPY IMPACT TEST

The tests has been performed according to the **EN ISO 179-1** (Aug 2010) standard
- Pendulum : 2J
- Impact speed : 2.919 m/s

	Control Frame	« North » Frame	« South » Frame
Mean Values (kJ/m²)	**4.1**	**4.9**	**5.0**
Standard deviation	0.4	0.4	0.3
Dispersion (%)	9.3	7.2	5.1

Those results show a non-significant evolution of the resilience of the aged material.

2/ FATIGUE AND WATERTIGHTNESS COUPLED TEST

Consist in a fatigue test with a watertightness control of the sample according to the **NF EN ISO 7500-1, NF E 11 063** and the **NF EN ISO 6892-1** standards.

70,000 cycling loads applied on the fixing system:

Phase	Charges (daN)	Charge totale appliquée au vérin F (= Cp,Cd x 4 rails)			
		Cd (daN)	Cp (daN)	Nombre de cycle	Fréquence (Hz)
1	Cp=-72,7 daN/étrier Cd=+72,7 daN/étrier	$\frac{3}{4}C_d$	$\frac{3}{4}C_p$	1	-
2		-218	218	50 000	1
3		Cd	Cp	1	-
4		-291	291	20 000	1

Watertightness control => “nothing to report, no leak has been detected on the water flow area.”

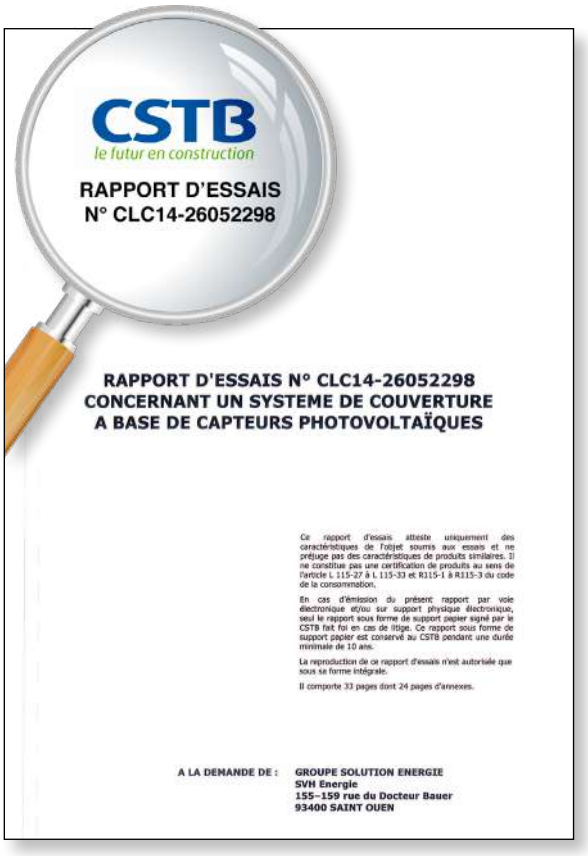
CONCLUSION

Even after 2 years of use, the product degradation meets our expectation according to those results and the watertightness of the water flow areas is insured even after an extreme mechanical stress.

CSTB Report wind resistance

WIND LOAD RESISTANCE COMPLIANT TO NF EN 12179

The tests were performed according to standard NF EN 12179 (October 2000): wind load resistance - Test method.



PRESSURE/DEPRESSION VALUES VALIDATED

Theoretical wind pressure	Theoretical wind depression
1700 Pa	- 1700 Pa

MEASUREMENT OF DISTORTION TO PRESSURE/ DEPRESSION THEORY

Objets	Sens	Pression/Dépression maximale	Flèches calculées	Résultats des mesures en mm
A	Pression	1 700	1 - 2 - 3	0,2
A	Pression	1 700	3 - 4 - 5	6
A	Dépression	- 1 700	1 - 2 - 3	- 0,1
A	Dépression	- 1 700	3 - 4 - 6	- 8,3

NO SIGNIFICANT DEFORMATION WAS OBSERVED.

RESISTANCE TO WIND LOAD IN INCREASED

The model is subject to pressure and depression, increased wind load equal to 150% of the theoretical wind load.

Objects	Pressure (Pa)	Depression (Pa)	Criteria	Results
A	1 969	- 2 025	No permanent damage should occur over framing members, the filling elements, openings, fasteners or anchors. The elements, decorative beading and covers must remain securely attached and the linings of the joints shall not be moved.	Satisfying

TEST OF RESISTANCE TO DESTRUCTION

To validate the theoretical load values due to the wind, the model was subjected to an extreme depression load to be greater than 236% of the design load.

Objects	Depression destruction / maximum	Observations
A	-5755 Pa	NO RECORDED DETERIORATION

Conclusion: The model has undergone depression loads of 5,755 Pa (340% of the theoretical value) without proven deterioration. This test validates easily the permissible load value of 1 700 Pa.

CERTISOLIS Test report

MECHANICAL AND CLIMATIC VALIDATION OF GSE IN-ROOF SYSTEM

PRE-CONDITIONING FOR UV RADIATION TESTS

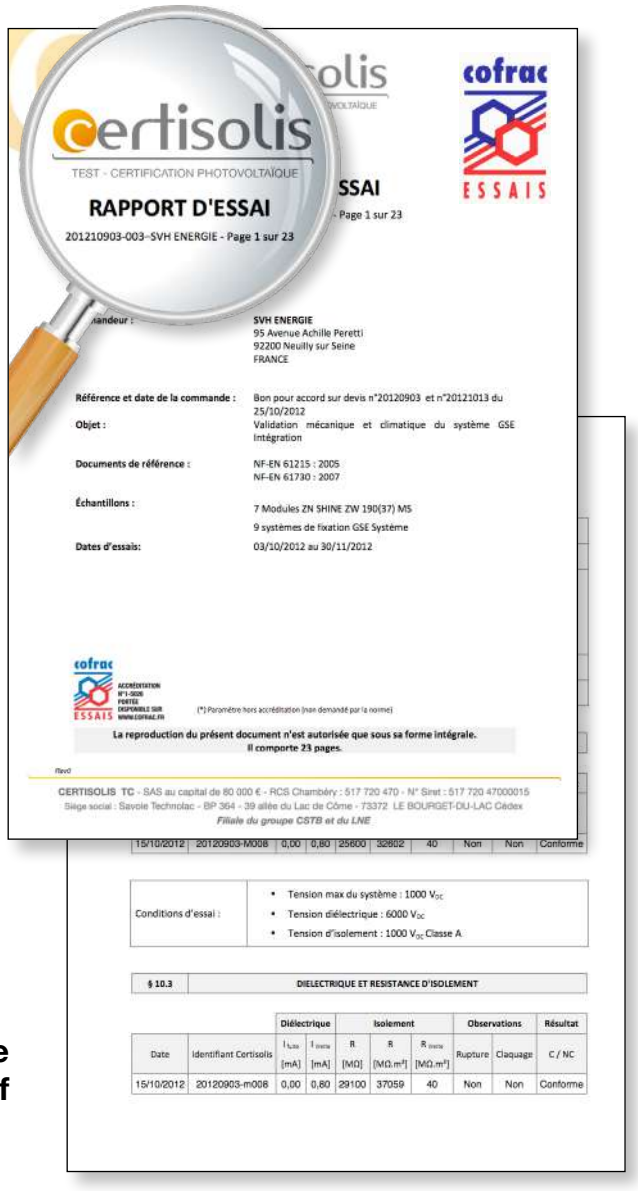
Sample(s)	20120903-M006 / 20120903-M007
Date tests conducted	10/18/2012 to 11/06/2012
Test equipment	E-201012023
Conclusion	**COMPLIANT**

THERMAL CYCLING TESTS (200 CYCLES)

Sample(s)	20120903-M005 (STRUCTURE) + M008 (MODULE)
Date tests conducted	10/18/2012 to 11/28/2012
Test equipment	Climatic chamber
Conclusion	**NO DEFECT OBSERVED**

HUMID HEAT TESTING (1000 HOURS)

Sample(s)	20120903-M002 (STRUCTURE) + M009 (MODULE)
Date tests conducted	10/19/2012 to 11/30/2012
Test equipment	Climatic chamber
Conclusion	**NO DEFECT OBSERVED**


certisolis
TEST - CERTIFICATION PHOTOVOLTAÏQUE
RAPPORT D'ESSAI
201210903-003-SVH ENERGIE - Page 1 sur 23
cofrac
ESSAIS
SVH ENERGIE
95 Avenue Achille Peretti
92200 Neuilly sur Seine
FRANCE
Référence et date de la commande : Bon pour accord sur devis n°20120903 et n°20121013 du 25/10/2012
Objet : Validation mécanique et climatique du système GSE Intégration
Documents de référence : NF-EN 61215 : 2005 NF-EN 61730 : 2007
Échantillons : 7 Modules ZN SHINE ZW 190(37) MS 9 systèmes de fixation GSE Système
Dates d'essais: 03/10/2012 au 30/11/2012
La reproduction du présent document n'est autorisée que sous sa forme intégrale.
Il comporte 23 pages.
CERTISOLIS TC - SAS au capital de 80 000 € - RCS Chambéry : 517 720 470 - N° Siret : 517 720 47000015
Filiale du groupe CSTB et du LNE
Conditions d'essai :
Tension max du système : 1000 V_{DC}
Tension diélectrique : 6000 V_{DC}
Tension d'isolement : 1000 V_{DC} Classe A
§ 10.3 DIELECTRIQUE ET RESISTANCE D'ISOLEMENT
Diélectrique
Isolement
Observations
Résultat
Date
Identifiant Certisolis
Rupture
Claquage
C / NC
15/10/2012 20120903-m008 0,00 0,80 29100 37059 40 Non Non Conforme

CONCLUSIONS

The module **remained in its structure throughout the duration of the test and met the requirements of paragraph 10.16 of standard NF EN 61215.**

The GSE IN-ROOF SYSTEM subjected to the UV radiation pre-conditioning test **exhibited no visual defect after 15 kWh.m2 of exposure to UV radiation.**

The modules installed with GSE IN-ROOF SYSTEM that have been subjected to climatic testing (Cycling and Humid heat) **remained in their structure throughout the duration of the tests.**
No defect observed.

CERTISOLIS Test report

TEST RELATED TO THE EXPANSION OF THE GSE INTEGRATION SYSTEM

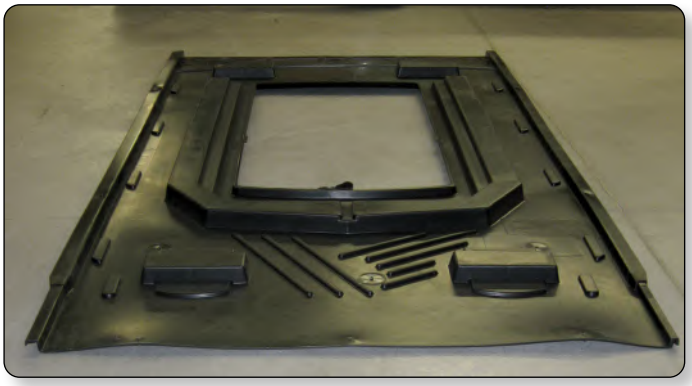
certisolis
TEST - CERTIFICATION PHOTOVOLTAÏQUE

THERMAL CYCLING TEST (200 CYCLES)

Sample(s)	20120903-M005 (STRUCTURE) + M008 (MODULE)
Date test conducted	from 10/18/2012 to 11/28/2012
Test conditions	20120903-M008 installed with a GSE Integration structure. 20120903-M005 mounted on a wooden structure for assembly onto an alloy chassis. Climatic chamber 200 cycles from -40°C to +85°C
Test equipment	Climatic chamber
Conclusion	**NO DEFECT OBSERVED**

HUMID HEAT TEST (1000 HOURS)

Sample(s)	20120903-M002 (STRUCTURE) + M009 (MODULE)
Date test conducted	from 10/19/2012 to 11/30/2012
Test conditions	20120903-M009 installed with a GSE Integration structure. 20120903-M002 mounted on a wooden structure for assembly onto an alloy chassis. Climatic chamber 1000 h at +85°C, RH 85%
Test equipment	Climatic chamber
Conclusion	**NO DEFECT OBSERVED**



CONCLUSIONS

Modules installed with GSE mounting systems were subjected to climatic testing [thermal cycling (200 cycles from -40°C to +85°C) and humid heat]. **The modules remained in place in their structure throughout the entire test period and were not damaged in any way.**

Seismic behaviour and slipping resistance

ANALYSIS OF THE SLIPPING RESISTANCE OF THE SYSTEM

Each test specimen is composed of a model with 2 PV modules (1 line in portrait format) on which is applied a representative snow load. 4 tests have been performed for different pitches values: 12°, 30°, 45° & 50°.

Typical snow load value : P_{SD}	**1800 Pa**
Typical snow load applied : P_N	**2970 N/module**
Extreme snow load value: P_U	**4460 N/module**
Snow load needed before wrecking : P_{RUIN}	**9100 N/module**

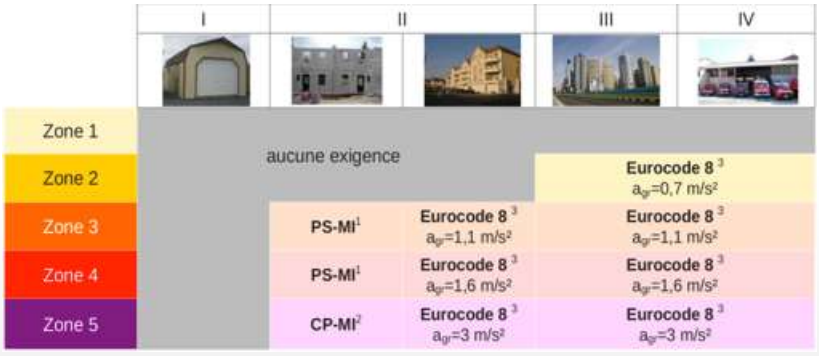
- 12 to 45°: No wrecking observed at 9100 N (910 kg/module)
- 50°: the PV module frame has been wrecked after 45 min of a 9100 N load

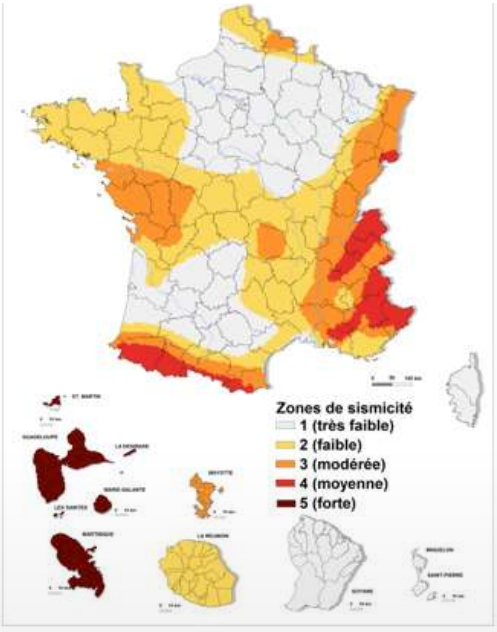
SEISMIC BEHAVIOR OF THE SYSTEM

Analysis of the system behaviour under seismic activity, while it is considered as a “non-structural element” according to the following standards:

- Eurocode 8 : NF EN 1998-1 and National Annex
- Eurocode 5 : NF EN 1995-1 and National Annex

For the metropolitan France, the system complies with all the seismic zones for all kind of buildings (including buildings Class IV as defined in the Eurocode 8).





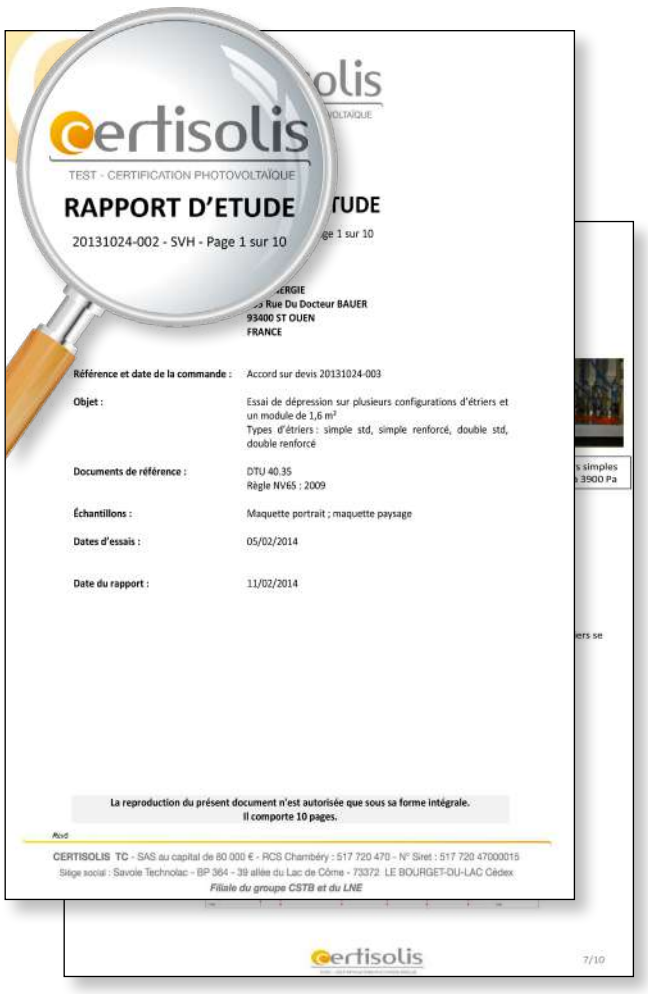
In comparison, the worst case in United-Kingdom is not worse than the zone III in France that we can consider the system **complying with all the seismic zones in United Kingdom.**

Clamps report

CLAMPS RESISTANCE – WIND ZONES

WIND ZONE – EUROCODE 1 & NV 65

The current standards allow us to define specific mechanical resistances of the system, according to the wind actions and the location of the PV field on the roof.



CLAMPS RESISTANCE

The results of tests conducted by CERTISOLIS (French test lab) have showed off the mechanical resistance of the system for each kind of clamps setting (4 or 6 clamps).

WIND ZONES/CLAMPS RELATION

Thus, we can establish global recommendations for the number of clamps to apply in all zones ruled by the Eurocode:

Ridge Height	Slope	Position	Zone 1		Zone 2		Zone 3		Zone 4	
			Normal	Exposed	Normal	Exposed	Normal	Exposed	Normal	Exposed
8 m	12°	Center	406	582	506	687	657	845	807	988
		Edges	717	1001	879	1172	1123	1427	1367	1659
		Corner	1051	1453	1281	1693	1625	2055	1969	2382
	30°	Center	417	593	517	698	668	856	818	999
		Edges	728	1012	890	1183	1134	1438	1378	1670
		Corner	1062	1464	1292	1704	1636	2066	1980	2393
	45°	Center	432	608	533	714	683	872	834	1015
		Edges	743	1028	906	1198	1149	1454	1393	1686
		Corner	1078	1479	1307	1720	1651	2081	1995	2408
10 m	12°	Center	429	613	534	723	692	888	849	1038
		Edges	754	1052	924	1230	1179	1498	1434	1740
		Corner	1104	1524	1344	1776	1704	2154	2064	2496
	30°	Center	440	624	545	734	703	899	860	1049
		Edges	765	1063	935	1241	1190	1509	1445	1751
		Corner	1115	1535	1355	1787	1715	2165	2075	2507
	45°	Center	456	639	561	750	718	915	876	1065
		Edges	781	1078	951	1257	1206	1524	1461	1767
		Corner	1131	1551	1371	1803	1731	2181	2091	2523

Maximum pressure: 4 clamps 1400Pa 6 clamps 1700Pa

Example : In wind zone 3 up to 8 m above the ridge, the GSE IN-ROOF system can be installed on the entire roof (including corners and edges) with 6 clamps.

CHUBB Liability Insurance

LIABILITY INSURANCE TRADING AND PRODUCT

ACE European Group Limited, a Chubb Company, Le Colisée, 8 avenue de l'Arche - 92419 Courbevoie Cedex, certifies that **GSE INTEGRATION, 5 RUE MORAND, 93400 ST OUEN,** is covered under Casualty policy **FRCASA034379,** the purpose of which is to cover the financial consequences of liability incurred by the Insured for damage or injury caused to third-parties and arising from the Insured's activities stated in the Contract.

From 1st January 2020 to 31st December 2021.

CHUBB

Attestation d'assurance
Responsabilité Civile
Casualty Insurance Certificate

Chubb European Group Limited, Le Colisée, 8 avenue de l'Arche - 92419 Courbevoie Cedex, atteste couvrir par police **Responsabilité Civile N° FRCASA34379,** la Société :

Chubb European Group Limited, *Le Colisée, 8 avenue de l'Arche - 92419 Courbevoie Cedex, certifies that*

GSE INTEGRATION
5 RUE MORAND
93400 ST OUEN

contre les conséquences pécuniaires de la Responsabilité Civile qu'elle est susceptible d'encourir à l'égard des tiers à l'occasion de l'exercice des activités définies au contrat.

Is covered under ***Casualty*** *policy N° FRCASA34379 , the purpose of which is to cover the financial consequences of liability incurred by the Insured for damage or injury caused to third-parties and arising from the Insured's activities stated in the Contract.*

Limites / *Limits* :

Garanties ***Coverages***	**Montant des garanties** ***Amount***
Responsabilité Civile Exploitation / *Public liability*	8.000.000€ par sinistre / *per claim*
Dont / *included*	
Faute Inexcusable / *Gross negligence*	3.000.000€ par sinistre et par année d'assurance / *per claim and in the annual aggregate*
Atteintes à l'environnement soudaines et accidentelles (Dommages Corporels, Matériels et Immatériels Consécutifs) / *sudden and accidental pollution*	1.500.000€ par sinistre et par année d'assurance / *per claim and in the annual aggregate*
Autres dommages matériels et immatériels / *property damages and financial losses*	5.000.000€ par sinistre / *per claim*
Dont / *Included*	
Dommages immatériels non-consécutifs / *pure financial losses*	750.000€ par sinistre / *per claim*
Dommages aux biens confiés / *property in care, custody and control*	750.000€ par sinistre / *per claim*

Garanties ***Coverages***	**Montant des garanties** ***Amount***
Responsabilité Civile Produits / *Products liability*	8.000.000€ par sinistre et par année d'assurance / *per claim and in the annual aggregate*
Dont / *included*	
Dommages matériels et immatériels	5.000.000€ par sinistre et par année d'assurance / *per claim and in the annual aggregate*
Dont / *Included*	
Dommages immatériels non-consécutifs (sur base Loss of Use pour les USA/Canada)/ *pure financial losses(on Loss of Use basis for USA/Canada)*	750.000€ par sinistre et par année d'assurance / *per claim and in the annual aggregate*
Frais de retrait et frais de dépose-repose engagés par l'Assuré / *First party recall costs and First party dismantling and re-mantling costs*	750.000€ par sinistre et par année d'assurance / *per claim and in the annual aggregate*

Chubb European Group Limited , compagnie d'assurance de droit anglais sise 100 Leadenhall Street, London, EC3A 3BP, immatriculée sous le numéro 1112892 et dont la succursale pour la France est sise Le Colisée, 8, avenue de l'Arche à Courbevoie (92400), numéro d'identification 450 327 374 R.C.S. Nanterre.
Chubb European Group Limited est soumise aux contrôles de la Prudential Regulation Authority PRA (20 Moorgate, London EC2R 6DA, Royaume Uni) et de la Financial Conduct Authority FCA (25 The North Colonnade, Canary Wharf, Londres E14 5HS, Royaume Uni).

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Période de Garantie / *Insurance Period* :

Du **13 février 2018** au **31 décembre 2018**/ *From* ***13th February 2018*** *to* ***31st December 2019.***

La présente attestation est délivrée pour servir et valoir ce que de droit et n'implique qu'une présomption de garantie à la charge de l'assureur.
This certificate is issued as a purpose of information only and is delivered to whom it may be concerned. It does not imply coverage from the Insurer.

Cette attestation ne peut engager Chubb European Group Limited au-delà des conditions générales et autres documents contractuels, auxquels elle se réfère.
The certificate shall not engage Chubb European Group Limited beyond the terms and conditions of the policy which it refers to.

Fait à Courbevoie, le 26 février 2018

Chubb European Group Limited , compagnie d'assurance de droit anglais sise 100 Leadenhall Street, London, EC3A 3BP, immatriculée sous le numéro 1112892 et dont la succursale pour la France est sise Le Colisée, 8, avenue de l'Arche à Courbevoie (92400), numéro d'identification 450 327 374 R.C.S. Nanterre.
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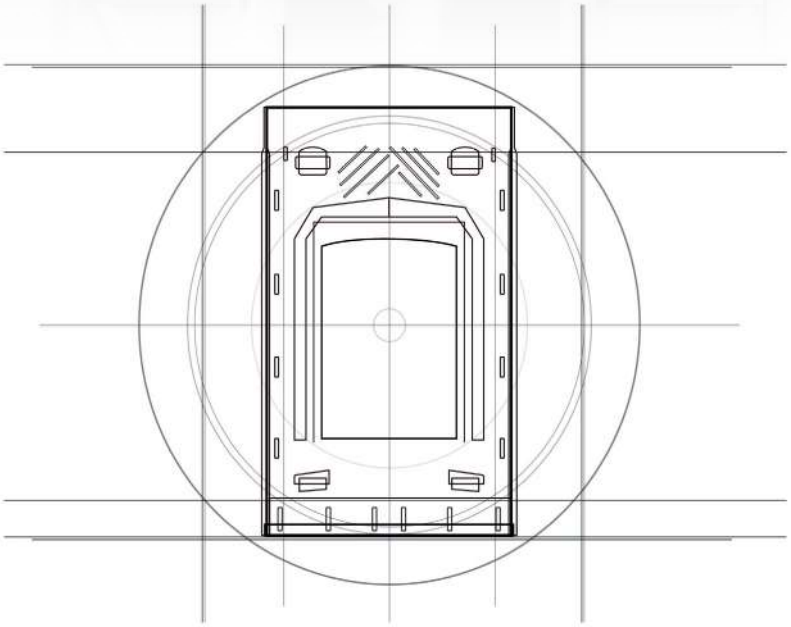
Projects

Projects

GSE Intégration



www.gseintegration.com

GSE Intégration

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