

## Price list – SPF Testing Standard tests and services

### Optical measurements

#### Transparent Covers, Glazings

**EUR**

Transmission measurement I ST (solar thermal, max. sample size 300 x 200 mm) Transmission spectrum 0.29 $\mu\text{m}$ – 2.5 $\mu\text{m}$ , determination of transmittance.....	570
Transmission measurement II ST (solar thermal, samples up to collector size) Transmission spectrum 0.30 $\mu\text{m}$ – 1.7 $\mu\text{m}$ , determination of transmittance.....	570
Transmission measurement I PV (photovoltaic, max. sample size 300 x 200 mm) Transmission spectrum 0.29 $\mu\text{m}$ – 2.5 $\mu\text{m}$ , determination of transmittance.....	1'600
Incident Angle Modifier ST (IAM), solar thermal Measurement of IAM (0° - 70°).....	570
Incident Angle Modifier PV (IAM), photovoltaic Measurement of IAM (0° - 70°).....	570
Glass base package ST, solar thermal Glass base package I ST (Transmission spectrum I ST + IAM-ST) .....	1'030
Glass base package II ST (Transmission spectrum II ST + IAM-ST).....	1'030
Glass base package PV, photovoltaic Glass base package I PV (Transmission spectrum I PV + IAM-PV) .....	2'070
Certification of solar glass for solar thermal application, according to the SPF certification scheme .....	3'440
for PV application, according to the SPF certification scheme .....	4'480
Combo package for solar thermal and PV application.....	5'740

#### Absorber, Absorber coatings

Absorptance, Reflectance (maximum sample size 300 x 200 mm) Spectrally resolved 0.30 $\mu\text{m}$ – 19 $\mu\text{m}$ , Determination of $\alpha$ and $\epsilon$ .....	570
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#### Others

Thermography Thermographic pictures: camera + operator (per hour) .....	200
Data analysis of the thermograms .....	on request
Other measurements Spectroscopy .....	on request
Light-scattering measurement (BSDF, BRDF, BTDF) Possible for almost all surfaces (glass, metal, mirrors, wood, concrete, etc.) Standard measurement .....	570
With light trap (optional for glass) .....	650

## Material tests

### Insulations

EUR

Assessment of outgassing behaviour	
Temperature resistance (basic test).....	700
Temperature resistance + Analysis of effect on antireflective glazings.....	1'160

### Absorber, Absorber coatings

Assessment of ageing stability of absorber coatings, according to ISO 22975-3 (Task-X)	
Test of stability against temperature and humidity.....	10'000

### Compensators, Connectors, Fittings

According to the SPF certification scheme.....	2'400
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## Systems and collectors

### Collectors (EN12975, ISO 9806, Solar Keymark, SRCC)

EUR

Performance according to EN12975 (LP).....	3'500
Durability test according to EN12975 (QP).....	5'600
Pressure drop (DP).....	+800
Collector base package: Complete test according to EN12975, (LP+QP+DP).....	6'400
Surcharge for evacuated tube collectors.....	+1'000
Surcharge for heatpipe collectors.....	+500
Surcharge for unglazed collectors.....	+2'000
Surcharge for In-roof collectors with flashing.....	+800
Surcharge for PVT collectors.....	+1'800
Hail test (SPF guideline, vkf), basic test 25 mm.....	1'300
Surcharge additional size (30mm / 35mm / 40mm / 45mm / 50mm).....	+220
Reduced performance test (nonofficial measurement).....	on request
Informal assessment of collector performance and quality (nonofficial tests).....	on request
Surcharge for large collectors.....	on request
Solar Keymark, SRCC.....	on request

### Systems (EN12976, Solar Keymark)

#### Thermosiphon systems

Performance measurement according to EN12976 (LP).....	6'400
Durability test according to EN12976 (QP).....	2'600
Thermosiphon base package*: Complete test according to EN12976, (LP+QP).....	7'100
CombiPack (Thermosiphon base package + Collector base package).....	11'900
Solar Keymark.....	on request

#### Systems for domestic hot water (SDHW)

Performance test according to EN12976 (LP).....	7'700
Durability test according to EN12976 (QP).....	2'900
SDHW Base package*: Complete test according to EN12976, (LP+QP).....	8'900
CombiPack (SDHW Base package + Collector base package).....	13'800
Solar Keymark.....	on request

#### \*Surcharge for non-tested collectors

Collectors which cannot be tested separately.....	1'700
Collectors which can be tested separately.....	4'500

## **Other**

The price list gives an overview about our standard tests and services. However, our infrastructure for testing and measuring components for solar thermal applications allows for much more. Let us know about your requirements, your demands and your wishes so that we can offer our custom made solution.

Contact: [testing@spf.ch](mailto:testing@spf.ch)

## **Remark**

The indicated prices are without VAT. SPF reserved its right to offer the services for a differing price. Prices in CHF, USD and GBB upon request.

Our General Terms and Conditions apply.

Prices are effective from 01.01.2019