**TRF 10 A: REVISION: 01**

**ONLINE APPLICATION FORM**

**TEST REPORT FOR SOLAR FLAT PLATE COLLECTOR (FPC)**

 **AS PER IS NO. 12933:2003 WITH ALL AMENDMENTS**

From: -

Company *(Please write complete Postal address)*

Dear Sir,

We hereby place an order on you for the services as described below:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr. No.** | **Description** | **Collector Area (m²)** | **No. of****samples** | **Test Fee per sample (Rs.)** | **Total****( Rs)** |
| 1. | Solar Flat Plate Collector |  |  | **20,000/- (Direct)****16,000/- (BIS)** |  |

1. A Bank Draft No. \_\_\_\_\_\_\_\_ dated \_\_\_\_\_\_\_\_\_ for Rs. \_\_\_\_\_\_\_\_\_ in favour of **Sardar Patel Renewable Energy Research Institute** payable at **Anand/ Vallabh Vidhyanagar** drawn on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is enclosed towards the Test Fee for the sample(s).
2. The manufacturer/supplier should submit the general specifications of the test sample as per **Annexure –I** (enclosed).
3. The manufacture/supplier should provide list of **components to be submitted along with Test sample** as per **Annexure -II** (enclosed).
4. Test Sample along with **Annexure-I** including the demand draft be handed over to the above mentioned address**.**
5. We accept **general terms and conditions** enclosed with this application.

Signature of authorized person

Name *(Capital Letters)*:

Designation:

Seal of the Company:

Dated:

For office use only

Date & time of Receipt: Inspected By:

Remarks if any: Sample Identification Number (I.D.)

Signature of Receiving Authority:

**ANNEXURE – I**

Information on Solar Flat Plate Collector (FPC)

1. **GENERAL**

|  |  |
| --- | --- |
| Name & address of manufacturer/supplier/ importer |  |
| Registration no. |  |
| Contact details of:1. E-mail
2. Website
3. Phone no (office, works/factory)
4. Mobile no.
 |  |
| Details of collaborator (if any)1. Name & address of collaborator
2. Name of the component being imported
 |  |

1. **SPECIFICATIONS OF THE TEST SAMPLE**

(All dimensions are in mm, unless specified otherwise)

**B1. SYSTEM DETAILS**

|  |  |
| --- | --- |
| Make/ model |  |
| Serial no. |  |
| Date/ month/ year of manufacturing |  |

**B2. COVER PLATE**

|  |  |
| --- | --- |
| Material (Tempered or Toughened glass) |  |
| Transmittance |  |
| Aperture area |  |
| Glass thickness |  |

**B3. COLLECTOR BOX**

|  |  |
| --- | --- |
| Material |  |
| Size (Length × Width × Height) |  |
| Thickness, mm | Channel section for side =Sheet for bottom =Support for glass = |
| Gross area of collector |  |
| General finish |  |

**B4. ABSORBER**

|  |  |
| --- | --- |
| Material |  |
| Thickness |  |
| Coating |  |
| Type of bonding between riser and sheet | Brazing / Soldering / TIG Welding |
| Gap between cover plate & absorber |  |
| Absorptivity |  |

**B5. COLLECTOR BOX INSULATION**

|  |  |
| --- | --- |
| Material |  |
| Coefficient of thermal conductivity at 100°C |  |
| Thickness |  |
| Covering of the back and side insulation |  |

**B6. GASKET & GROMMETS**

|  |  |
| --- | --- |
| Material (Gaskets) |  |
| Grommets |  |
| Thickness |  |

**B7. RISER**

|  |  |
| --- | --- |
| Material |  |
| Number of risers |  |
| Diameter  |  |
| Type of bonding with riser and header |  |
| Static pressure withstand |  |

**B8. HEADER**

|  |  |
| --- | --- |
| Material |  |
| Diameter  |  |
| Material of coupling |  |

1. **TESTING FEE DETAILS**

|  |  |
| --- | --- |
| Name & address of the issuing bank |  |
| Bank draft no. & date |  |
| Amount | Rs.  |

**D. ANY OTHER INFORMATION**

**Declaration**

This is to certify that the above-furnished information is true to the best of my knowledge and belief. The RTC, SPRERI or its authorized nominee will be free to visit our works in order to assess the details provided above by giving an advance notice in writing.

Date:

Place: Signature with Seal

***NB:*** *To be signed by officer not below than rank of G.M./Equivalent.*

**ANNEXURE - II**

**List of components/ information to be submitted along with the sample**

|  |  |
| --- | --- |
| A fully assembled unit of Solar Flat Plate Collector (FPC) | ----- |
| Absorber with riser having total minimum area 400 cm² (20 cm × 20 cm) | One piece |
| Grommet | One piece |
| Gasket/sealant of about 300 mm length | One piece |
| Matching flanges / unions | 2 Nos. |
| Flange blanks/plugs for closing the header ends | 3 Nos. |
| Information regarding maximum operating temperature and pressure |  °C kPa |
| K-value certificate of insulation material | Photocopy |
| Collector box material measuring 150 mm × 90 mm Minimum | One piece |
| Back sheet of collector box material 400 cm² (20 cm × 20 cm) | One piece |
| Mass and specific heat of toughened glass, copper sheet (absorber) and insulation material (glasswool) used in the collector  | ---- |
|  | Glass | Absorber (Copper tube & Riser) | Insulation |
| Mass (kg) |  |  |  |
| Specific heat (J/kg °C) |  |  |  |

**GENERAL TERMS AND CONDITIONS**

1. The manufacture/supplier should supply the system as per the specifications and will take back the system at their own cost after the issue of Test Report within two months.
2. For identification purpose, all components supplied to the Centre for testing purpose shall be marked clearly.
3. RTC, SPRERI shall not be responsible for any loss or damage caused to the sample if any, during the testing of the system.
4. RTC, SPRERI is only a testing centre and not a certifying authority and the results reported are valid under stipulated conditions of measurements.
5. A copy of the Test Report containing all the parameters measured at RTC, SPRERI as per the BIS specifications and claims made by manufacturer/supplier will be issued to the manufacturer/supplier/importer.
6. The report contains the following **DISCLAIMER**:
7. This is a Report on measurements carried out on the samples submitted at RTC, SPRERI.
8. The TEST REPORT refers only to the sample supplied. The results presented here relate only to the conditions of the measurements at the time of testing.
9. RTC, SPRERI does not accept any liability for any consequences including commercial or otherwise arising out of the utilization of the information contained in the Report.
10. Any queries related to this Report will not be entertained after one month of receipt of this report.
11. This Test Report is not a legal document and is not valid for any kind of legal Formalities.
12. The Test Report in full or in part may not be published or advertised or used for any legal action unless prior permission has been secured from this Test Centre.

**CHECKLIST BEFORE SUBMISSION OF TEST SAMPLE OF SOLAR FLATE PLATE COLLECTOR (FPC)**

1. Information duly filled in **Annexure-I**
2. List of components/information submitted along with the sample as per **Annexure-II**