

# NATIONAL INSTITUTE OF SOLAR ENERGY

(An autonomous institute of Ministry of New & Renewable Energy, Government of India)

Village & Post-Gwalpahari, Dist-Gurgaon, (Haryana), Pin – 122003.

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## **ORDER FORM No-01**

### **EVACUATED TUBE BASED SOLAR WATER HEATING SYSTEM**

From: -

Company (*Please write complete Postal address*)

Sir

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

S.NO.	Description	Capacity (l pd)	No. of samples	Test Fee per sample (Rs)	Total (Rs)
1.	EVACUATED TUBE BASED SOLAR WATER HEATING SYSTEM			10000/- (plus service tax @12.36% extra)	

1. A Bank Draft No. \_\_\_\_\_ dated \_\_\_\_\_ for Rs. \_\_\_\_\_ in favour of **National Institute of Solar Energy (NISE)** payable at **Gurgaon** drawn on \_\_\_\_\_ is enclosed towards the Test Fee for the sample/(s).
2. We hereby submit the general/specifications of the test sample as per **Annexure -I** (enclosed).
3. We hereby provide the **components of the sample** as per **Annexure -II** (enclosed).

4. Sample along with **Annexure-I** including the demand draft be handed over to the **Customer Service Cell (Room No.A-12)** at National Institute of Solar Energy, Gwal Pahari , Gurgoan.
  
5. We accept **general terms and conditions** enclosed with this **ORDER FORM NO-01**

Dated:

Signature of authorized person

Name (Capital Letter) :

Designation:

Seal of the company:

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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 EVACUATED TUBE BASED SOLAR WATER HEATING SYSTEM

#### A. GENERAL

NAME & ADDRESS OF MANUFACTURER/SUPPLIER/IMPORTER	
REGISTRATION NO.	
CONTACT DETAILS: I. E-MAIL II. WEBSITE III. PHONE NO (OFFICE, WORKS/FACTORY) IV. MOBILE NO.	
DETAILS OF COLLABORATOR, (IF ANY) I. NAME & ADDRESS OF COLLABORATOR II. NAME OF THE COMPONENT BEING IMPORTED	

#### B. SPECIFICATIONS OF THE TEST SAMPLE

(ALL DIMENSIONAL ARE IN MM, UNLESS SPECIFIED OTHERWISE)

##### B1. SYSTEM DETAILS

MAKE/ MODEL	
SERIAL NO.	
DATE/MONTH/YEAR OF MANUFACTURING	
SYSTEM CAPACITY(lpd)	
TECHNOLOGY [All glass direct flow/Heat-pipe type/Any other (pl. Specify)]	

##### B2. EVACUATED GLASS TUBE

GLASS TUBE LENGTH	
WEIGHT OF SINGLE GLASS TUBE (EMPTY) (gm)	
INNER DIAMETER OF GLASS TUBE	
OUTER DIAMETER OF GLASS TUBE	
GLASS WALL THICKNESS	
CENTER TO CENTER DISTANCE BETWEEN TWO GLASS TUBES	
NUMBER OF GLASS TUBES, nos	
GROSS AREA OF A SINGLE TUBE, m <sup>2</sup>	

Exposed AREA (GROSS) OF A SINGLE TUBE, m <sup>2</sup>	
GROSS APERTURE AREA OF THE COLLECTOR, m <sup>2</sup>	
REFLECTOR BELOW THE GLASS TUBE (PROVIDED/NOT PROVIDED) MATERIAL	
PROTRUSION EVACUATED TUBES INTO TANK	
TOTAL AREA OF EVACUATED TUBE INTO TANK	
DETAILS OF SELECTIVE COATING	
ABSORBTIVITY	
EMISSTIVITY	
VACCUM DEGREE	
EMPTY BURSTING TEMPERATURE	
PRESSURE RESISTANCE	

### **B3 EVACUATED GLASS TUBE BOTTOM HOLDING CAP**

MATERIAL	
THICKNESS	

### **B4 STORAGE TANK**

MATERIAL AND THICKNESS OF OUTER CLADDING	
MATERIAL AND THICKNESS OF INNER TANK	
MATERIAL & THICKNESS OF INSULATION	
CAPACITY(LITERS) A. WITHOUT TAKING INTO ACCOUNT WATER IN THE TUBES/COLLECTOR B. WITH TAKING INTO ACCOUNT WATER IN THE TUBES/COLLECTOR	
HEIGHT OF HOT WATER WITHDRAWAL POINT FROM BOTTOM OF THE TANK	
HEIGHT OF COLD WATER INLET FROM BOTTOM OF THE TANK	

### **B5 CONNECTING PIPING (WHERE APPLICABLE)**

MATERIAL	
INNER DIAMETER	
OUTER DIAMETER OF CLADDING	
INSULATION MATERIAL & THICKNESS	

### **B6 SUPPORTING STANDS/FRAME**

MATERIAL	
THICKNESS AND OTHER DETAILS	

EPROXY/ANTI CORROSION COATING	
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**B7 RUBBER COMPONENTS**

MATERIAL	
GASKET (IF ANY)	
TUBE SEAL INSIDE THE TANK	

**C. TEST REPORT**

COPY OF TEST REPORT IN ENGLISH (IF ANY)	
TWO PHOTOGRAPHS OF SAMPLE	

**D. TESTING FEE DETAILS**

NAME & ADDRESS OF THE ISSUING BANK	
BANK DRAFT NO. & DATE	
AMOUNT(RS).	

**E. ANY OTHER INFORMATION:**

**Declaration:**

This is to certify that the above-furnished information is true to the best of my knowledge and belief. The National Institute of Solar Energy 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 the rank of G.M. / Equivalent

## **ANNEXURE II**

### **LIST OF COMPONENTS TO BE SUBMITTED ALONG WITH SAMPLE**

1. A fully assembled unit of Evacuated tube based Solar Water Heating System.
2. Two pieces of Evacuated Tube
3. Sample of Glass tube holder
4. Sample of insulation material used in storage tank.
5. A manufacturer certificate in respect of R-value of insulation material.
6. One piece of washers, Gasket.
7. A copy of instruction manual containing information on instruction for installation, repair & maintenance, common failure and safety precautions.

## GENERAL TERMS AND CONDITIONS

1. The manufacture/supplier should supply and install the system on the test bed as per the specifications and to the satisfaction of the testing authority and will take back the system at his own cost after the issue of Test Report within one month.
2. For identification purpose, all components supplied to the Centre for testing purpose shall be marked clearly.
3. NISE shall not be responsible for any loss or damage caused to the sample if any, during the testing of the system.
4. National Institute of Solar Energy 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 NISE as per the MNRE specifications and claims made by manufacturer/supplier will be issued to the manufacturer/supplier/importer
6. The report contains the following **DISCLAIMER**:
  - a) This is a report on measurements carried out on the Samples submitted at the National Institute of Solar Energy (NISE).
  - b) 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.
  - c) National Institute of Solar Energy does not accept any liability for any consequences including commercial or otherwise arising out of the utilization of the information contained in the report.
7. Any queries related to this report will not be entertained after one month of receipt of this report.
8. This test report is not a legal document and is not valid for any kind of legal Formalities.
9. 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.

**CHECK LIST FOR EVACUATED TUBE COLLECTOR (ETC)  
AS PER MNRE NORMS**

1. Type or model number
2. Name, logo or symbol of manufacturer
3. ETC water heating system
4. Serial number
5. Two Photographs of the system
6. Demand Draft favouring National Institute of Solar Energy (NISE) payable at Gurgaon.
7. Order form 01 duly filled.
8. Copy of ANNEXURE I
9. Copy of the Registration of the Company as per Registration Act, 1956, joint venture/foreign collaboration etc.