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NOMENCLATURE

<u>Symbol</u>	<u>Description</u>	<u>Unit</u>
A	Plate surface area	m^2
AR	Aspect Ratio, dimensionless	
C	Circumference of the plate	
Cp	Specific heat	$J/kg\ K$
f	Friction factor, dimensionless	
grad	Gradient ($grad\ u = \partial u/\partial x + \partial u/\partial y + \partial u/\partial z$)	
h	Heat transfer coefficient	$W/m^2.K$
K	Thermal conductivity	$W/m\ K$
L	Flat plate chord Length	m
Nu	Nusselt number, dimensionless	
Pr	Prandtl number, dimensionless	
P	Pressure	N/m^2
Q	Heat flow	W
Re	Reynolds number, dimensionless	
St	Stanton number	
T	Temperature	$^{\circ}C, K$
t_f	Fluid temperature	
ΔT	Temperature difference	
V	Air velocity	m/s
$\mathbf{u}$	Velocity vector, $(\overline{u_i} + \overline{v_j} + \overline{w_k})$	
ΔX	Thickness of the expanded polystyrene foam	m

Greece letter

α	Angle of attack	degree
μ	Viscosity	$N\ s/m^2$
ρ	Density	kg/m^3
ξ	Length angle the inclined plate	m

Subscripts

<i>Cond.</i>	Conduction
<i>m</i>	Average
<i>max</i>	Maximum
<i>net</i>	Net
<i>o</i>	Outlet
<i>p</i>	Plate
<i>rad.</i>	Radiation
<i>W</i>	Wall

Abbreviation

2-D	Two-Dimensional
3-D	Three-Dimensional
CFD	Computational Fluid Dynamic
CPU	Central Processing Unit
CV	Control Volume
db	Dry-bulb
Eq.	Equation
Fig.	Figure
ISES	International Solar Energy Society
<i>iso</i>	Isothermal
<i>LMTD</i>	Logarithmic mean temperature difference
<i>NTU</i>	Number of transfer unit
OPF	Overall performance factor
PDEs	Partial differential equations
X_{cr}	Local critical length