





FENESTRATION CALCULATION NATURAL VENTILATION

Window to floor area ratio for Storey 1 is 15.33 %

#### CONSTANTS

Conductance Constant for Storey 1 is 113.98 X 1.40 = 159.57 SHG Constant for Storey 1 is 113.98 X 0.13 = 14.82

# CONDUCTANCE

Conductance of Window is  $2.70 \times 7.90 = 21.33$  Conductance of Window is  $0.28 \times 7.90 = 2.21$  Conductance of Window is  $1.08 \times 7.90 = 8.53$  Conductance of Window is  $2.70 \times 7.90 = 21.33$  Conductance of Window is  $0.81 \times 7.90 = 6.40$  Conductance of Window is  $2.70 \times 7.90 = 21.33$  Conductance of Window is  $2.70 \times 7.90 = 21.33$  Conductance of Window is  $3.78 \times 7.90 = 29.86$  Conductance of Window is  $1.26 \times 7.90 = 9.95$  Conductance of Window is  $1.35 \times 7.90 = 10.66$  Conductance of Window is  $0.81 \times 7.90 = 6.40$ 

Total Conductance for Storey 1 is 138.01 PASS

### SOLAR HEAT GAIN

## NORTH

Solar heat gain of Window (P=600.00, G=300.00, P/H=0.33) is  $2.70 \times 0.81 \times 0.4 = 0.87$  Solar heat gain of Window (P=600.00, G=300.00, P/H=0.60) is  $0.28 \times 0.81 \times 0.3 = 0.07$  Solar heat gain of Window (P=600.00, G=300.00, P/H=0.50) is  $1.08 \times 0.81 \times 0.33 = 0.29$  Solar heat gain of Window (P=600.00, G=300.00, P/H=0.29) is  $2.70 \times 0.81 \times 0.44 = 0.96$ 

#### EAST

Solar heat gain of Window (P=600.00, G=300.00, P/H=0.50) is 0.81 X 0.81 X 0.66 = 0.43

### SOUTH

Solar heat gain of Window (P=600.00, G=300.00, P/H=0.33) is  $2.70 \times 0.81 \times 0.38 = 0.83$  Solar heat gain of Window (P=600.00, G=300.00, P/H=0.25) is  $3.78 \times 0.81 \times 0.42 = 1.29$  Solar heat gain of Window (P=600.00, G=300.00, P/H=0.25) is  $1.26 \times 0.81 \times 0.42 = 0.43$  Solar heat gain of Window (P=600.00, G=300.00, P/H=0.33) is  $1.35 \times 0.81 \times 0.38 = 0.42$ 

#### WEST

Solar heat gain of Window (P=600.00, G=300.00, P/H=0.50) is  $0.81 \times 0.81 \times 0.83 = 0.54$ 

Total Solar Heat Gain for Storey 1 is 6.13 PASS

AREA SCHEDULE:

NEW DWELLING: 149.94m<sup>2</sup>

TOTAL: 149.94m<sup>2</sup>

ERF: 300m<sup>2</sup>

COVERAGE 49.98%

## **GARDEN ROUTE HOUSE PLANS**

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PROJECT TITLE: NEW DWELLING

FOR OWNER: SEEGENOT ONTWIKKELING

ERF NO: 1123

TOWNSHIP: TERGNIET

MUNICIPALITY: MOSSEL BAY

CREATED BY: ENGELA MOGGEE

DATE: FEBRUARY 2018

DRAWING:

SHEET: 001

OWNER'S SIGNATURE:

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