

Building Type : Group Housing
Climate Zone : Composite
Built Up Area : 7535 m²
Conditioned Area: 5000 m²
WWR :23.5%
Occupancy Type : 24 hours
ECBC Compliance : Prescriptive method

Lighting Power Density

Space Function Method

Bedroom / Drawing Room :9 W/ m²
Lobby :9 W/ m²
Toilets :7 W/ m²
Kitchen :10 W/ m²
Common Areas :4 W/ m²
Fixtures :LED Bulbs

Occupancy Sensors - corridors, toilets,
Society offices, conference rooms

HVAC Specifications

BEE 5 star rated split AC

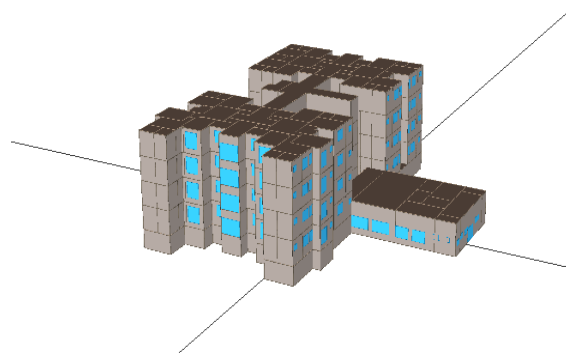
Piping and ductwork

System Description: 20 mm thick Nitrile
Rubber
R value: 1.4, R value of insulation: 0.38,
Thickness of insulation 13 mm.

Air leakage

Envelope is sealed, caulked, gasket or
weather-stripped.

Transit Flats, Assandh Karnal (Haryana)



PROJECT SUMMARY

The transit flat building is five storied building which will serve as residential quarters. The longer axis of the building is in East-West direction.

Building Envelope Suggestions

Opaque wall : 12 mm Plaster + 115 mm AAC
Blocks + 5mm Air Cavity + 230 mm AAC
Blocks + 12 mm Plasters
U-value: 0.4 W/ m²K
Assembly thickness : 369 mm:

Roof Assembly: 10mm tiles + 50 mm
Portland Cement Concrete +85 mm PUFF
insulation + 150mm RCC + 12 mm Cement
Plaster
U-value: 0.39 W/m²K
Assembly thickness : 275 mm

Glazing Type 1: DGU(Double Glazed Unit)
U-value: 1.5 W/ m²K, SHGC: 0.28, VLT: 46%

Glazing Type 2: DGU(Double Glazed Unit)
U-value: 1.8 W/ m²K, SHGC: 0.31, VLT: 36%

Exterior Lighting Details

Fixtures with minimum efficacy of 80
lumens/watt.

Sensor: Astronomical time switch

ECBC requirement of 20% of total hot water
requirement through solar water heaters.

