

RTA Office, Panchkula (Haryana)

Building Type : Business
Climate Zone : Composite
Area : 3511.7 m²
WWR : 34%
Conditioned Area: 2610 m²
Occupancy Type : Day time use
ECBC : Prescriptive method
(**ECBC 2007**)

Lighting Power Density

LPD of the proposed case is 7 W/ m² as per Building Area method.

Fixtures : LED Bulbs

Occupancy Sensors: in corridors, toilets, offices and conference rooms

HVAC Specifications

BEE 5 star rated split AC

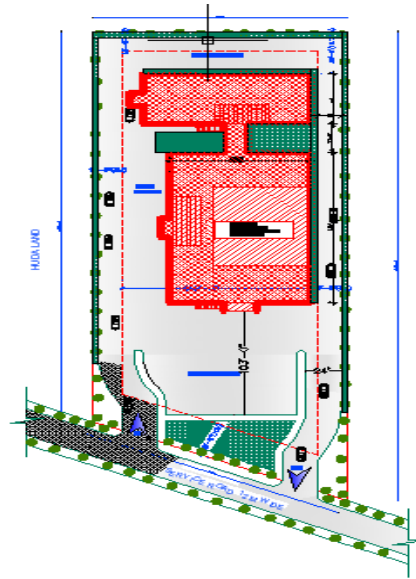
Piping and ductwork

System Description: 20 mm thick Nitrile Rubber, R value of insulation: 0.35, Thickness of insulation 13 mm.

Air leakage

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

PROJECT SUMMARY



RTA office Panchkula is three storied building. Building is oriented toward East-West.

Building Envelope

Opaque wall : 20 mm Plaster + 115 mm AAC Blocks + 20 mm Air Cavity + 230 mm AAC Blocks + 20 mm Plasters

U-value, W/m²K: 0.39 W/ m²K

Assembly thickness : 405 mm:

Roof Assembly: 10mm tiles + 20 mm Cement screed +75 mm XPS insulation + 150mm RCC + 20 mm Cement screed

U-value: 0.33 W/ m²K

Assembly thickness : 275 mm

Glazing type 1: DGU(Double Glazed Unit)

U-value: 1.87 W/ m²K, SHGC: 0.28, VLT: 23%

Glazing type: Single Glazed Unit

U-value: 5.4 W/ m²K, SHGC: 0.53, VLT: 43%

Exterior Lighting Details

LED fixtures with minimum efficacy of 80 lumens/watt.