

# RTA Office, Panchkula (Haryana)

**Building Type** : Business  
**Climate Zone** : Composite  
**Area** : 3511.7 m<sup>2</sup>  
**WWR** : 34%  
**Conditioned Area**: 2610 m<sup>2</sup>  
**Occupancy Type** : Day time use  
**ECBC** : Prescriptive method  
(**ECBC 2007**)

## Lighting Power Density

LPD of the proposed case is 7 W/ m<sup>2</sup> 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

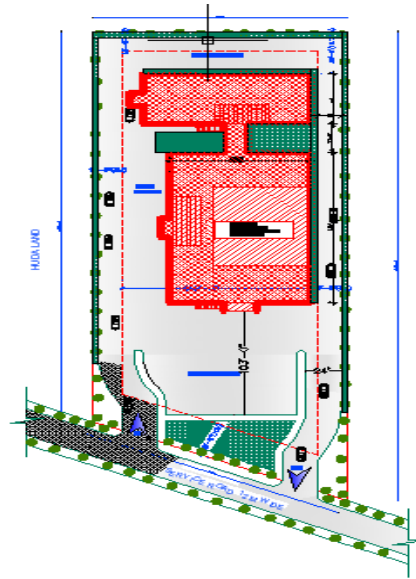
## Piping and ductwork

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/m<sup>2</sup>K: 0.39 W/ m<sup>2</sup>K

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/ m<sup>2</sup>K

Assembly thickness : 275 mm

**Glazing type 1**: DGU( Double Glazed Unit)

U-value: 1.87 W/ m<sup>2</sup>K, SHGC: 0.28, VLT: 23%

**Glazing type**: Single Glazed Unit

U-value: 5.4 W/ m<sup>2</sup>K, SHGC: 0.53, VLT: 43%

## Exterior Lighting Details

LED fixtures with minimum efficacy of 80 lumens/watt.