

AIR-CONDITIONING WORK IN SBILD (Gr AND FIRST FLOOR), Sultania Road, BHOPAL. M.P.

Sl. No.	DESCRIPTION OF ITEMS	QTY	UNIT	In Figure	AMOUNT
1	<p>SPLIT AC (INVERTER MODEL) :- Supply installation testing and commissioning of Split type wall mounted Air Conditioning unit of following capacity including indoor, outdoor unit fitted with inverter based rotary compressor, copper condensor and first charge refrigerant R410A. The condensing unit working range should be capable for providing cooling between +/-5deg C to 50 deg.C & heating with in 0 deg.C to 15 deg.C including connection of copper pipe of required size upto 3 mtr., insulation. cordless remote control, auto air swing louvers, wall stand for out door unit, conection copper lead wire, condensed water outlet pipe 2 mtr.complete etc as required. Outdoor / Indoor units should be of same make (Brand).</p>				
	a. 1.0 TR Star Rating 5 Star	2	No		
	a 1.5 TR Star Rating 5 Star	3	No		
2	<p>CASSAETTE AC :- Supply installation testing and commissioning of Split type ceiling cassette Slim Line /Floor Standing Air Conditioning unit of capacity including indoor, outdoor unit fitted with rotary / screw compressor , copper condenser and first charge refrigerant R410A I eco friendly green gas only, cordless remote control, auto air swing louvers. connection copper lead wire between outdoor and indoor unit, connection copper lead wire, excluding connection copper pipe of required size. insulation, floor stand for out door unit, condense water outlet complete etc as required. Outdoor / Indoor units should be of same make (Brand).</p> <p>A Ceiling Suspended I Mounted Cassette type 4 Way Unit with inbuilt drain pump & decorative panels</p>				
	a 1.8 TR I 2.0 Single Phase	7	No		
	b 2.4 TR Single Phase	2	No		
3	<p>AC UNIT (CEILING MOUNTED ONE WAY) : Supply installation testing and commissioning of Corner Cassette type Unit (One way), including indoor, outdoor unit fitted with rotary / screw compressor , copper condenser and first charge refrigerant R410A I eco friendly green gas only, cordless remote control, auto air swing louvers. connection copper lead wire between outdoor and indoor unit, connection copper lead wire, excluding connection copper pipe of required size. insulation, floor stand for out door unit, condense water outlet complete etc as required. Outdoor / Indoor units should be of same make (Brand).</p>				
	a 1.5 TR Single Phase	3	No		

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4	Supply, Installation, testing & commissioning of suction/ discharge copper pipe line in split Air Conditioning unit 1.0 /1.5 TR/2 TR /3 TR capacity including brazing, nitrile rubber insulation 6/9mm thick class 'O', etc complete as required.				
	a Copper tube 1/4"	25	Mtrs		
	b Copper tube 3/8"	25	Mtrs		
	c Copper tube 1/2"	40	Mtrs		
	d Copper tube 5/8"	40	Mtrs		
5	DRAIN PIPE : (C - PVC) Providing and fixing of CPVC, 6Kg/cm2 drain water piping with fittings, support and insulated with 6 mm thick closed cell elastomeric nitrile rubber insulation complete as per specification				
	a. 25 mm dia.	75	RM		
	b. 40 mm dia.	150	RM		
6	SOFT / HARD COPPER PIPING : Supply,Installation , testing and commissioning of Suitable copper refrigerent piping with insulation between indoor and outdoor units.				
	a. Suitable size of Copper Refrigerent Piping for the machines.	5	Kg		
7	FABRICATED STEEL : Supply & fixing of MS angle/ channel/ flat etc with require welding, one coat of red oxide and two coat black paint etc as required.	1500	Kg		
8	FRESH AIR PIPING : : Supplying,and fixing of the following PVC pipe for fresh air in-take for the AC units				
	a. 100 mm dia PVC pipe suitable to AC units.	100	RM		
9	Dismantling of existing 8.5 Tr ductable AC unit, condensor unit, copper piping etc complete as required.	1	Job		

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10	Installation, testing and commissioning of the 8.5 Tr ductable AC unit, condensor unit, copper piping etc complete as required including gas charging.	1	Job		
11	<p>GSS DUCTING : (ROUND / SQUARE DUCT)</p> <p>Supply and fixing of SITE FABRICATED GI sheet metal ducts in accordance with the approved shop drawings and as required as per specifications. GI sheet will be as per IS-277. All necessary GI /MS supports using thread rods (as directed) angle, flat. and anchor bolts, food grade neoprene gaskets, food grade adhesive included in the scope.</p>				
	a. 22 swg	22	Sq M		
	b 24 swg	4	Sq M		
12	<p>DUCT INSULATION :</p> <p>Supplying and fixing of following thickness of mat finish closed cell Nitrile rubber (class "1") insulation on existing duct after applying two coats of cold setting adhesive complete as per specifications and as required.</p>				
	a. 12/13 mm Thick	25	Sq M		
13	<p>ACOUSTIC LINING OF DUCT :</p> <p>Supply, installation, testing and commissioning of Internal duct accoust1c insulation with open cell structured Class "O" fire retardent nitrile rubber with density 140 - 180 kg/m3 and specs as per RISAC Chart specification sheet inside of the AHU supply air ducting up to 4 mtr length from AHU mouth as per the specifications . it should have antimicrobial properties.</p>				
	a. 10 MM Thick	2	Sq M		
14	<p>ALUMINIUM DAMPERS :</p> <p>Supply and Installation of opposed blade aluminium collar damper complete as req.</p>	1.5	Sq M		

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15	<p>GRILLS :</p> <p>Supply and Installation of following size EP 15 degree Extruded Aluminium powder coated linear grills.</p> <p>a. 150 mm</p>	2	Sq M		
16	Supply and fixing of fire retardent Canvass connection complete as required.	1	Nos		
17	<p>CONTROL CABLE :</p> <p>Providing & fixing of control wiring/ power cabling with following sizes of copper conductor cable between indoor unit/outdoor unit/controllers inside / out side building in Pvc conduit , on surface / existing channel, cable tray i/c making connection etc. as reqd.</p> <p>a. 2 Core X 1.5 sq mm in 20 mm PVC conduit.</p>	150	RM		
18	<p>FIRE DAMPER :</p> <p>Supply installation testing commissioning of fire dampers in supply air duct I return air duct I main branch of required size as and where required i/c control wiring The motorised damper shall open I close on power failure and restore. The system shall also function on fire signals accordingly complete as required as per specification</p> <p>a Fire damper</p>	1	Sq M		
	b Actuators	1	Nos		
19	<p>AC INSTALLATION</p> <p>Dismantalling and re-installation of split type Wall Mounted Air Conditioner indoor, outdoor unit fitted with rotary compressor, copper condenser and first charge refrigerant R410A, including connection of copper pipe and material supplied with complete unit etc as required (Excluding cost of copper pipe)</p>	2	Nos		
TOTAL :					