

**PROPOSED NEW BRANCH SME, ANANTAPUR
ESTIMATE FOR AIR CONDITIONING WORKS**

S.N O.	DESCRIPTION	UNIT	QTY	RATE (INR)	AMOUNT(INR)
	PART - A : HIGH SIDE BOQ				
1	Supply of the following Ductable Split Air conditioners fitted with R410 a gas, scroll compressors , aluminum finned air cooled condensers, condenser fans,thermostatic expansion valve, Evaporator with cooling coils , canvass connection and blower section and microprocessor control and corded remote, related controls as per manufacturers standards				
	8.5 TR with Multiple Compressors	Nos	2		
2	Supply of INVERTER TYPE 3 star rated Hi wall split Airconditioners fitted with rotary/reciprocating compressors, air cooled condenser, direct expsion valve and related controls as per manufacturers standards with cordless remote				
	1.5 TR Capacity	Nos.	4		
	TOTAL for Equipment – PART A				
	PART – B: LOW SIDE WORKS				
1	Installation, Lifting, positioning as per site conditions,Testing and Commissioning of Ductable units along with gas charging for 8.5 TR Ductable Units	Nos	2		
2	Installation, Lifting, positioning as per site conditions,Testing and Commissioning of Hi wall Split units of 2.0 TR and 1.5 TR capacity	Nos	4		
3	Supply and fixing of factory fabricated G.S.S. Rectangular ducting complete with all accessories viz. anchor fastener, black painted M. S. angle / rod supporting, Expanded Polyethylene gasket galvanised hardware, etc complete as per specs.				
	a) 22 Gauge	Sqmt	25		
	b) 24 Gauge	Sqmt	75		
4	Supply & installation of suction & discharge Hard copper Refrigerant piping with proper supports/hangers from ceiling/wall as required at site & approved by consultant & duly insulated with 9 mm thick nitrile as per standard specifications				
	Liquid line line for 11.0 TR suction line	Rmt	45		
	Suction line for 11.0 TR suction line	Rmt	45		
5	Supply & installation of suction & discharge Soft copper Refrigerant piping with proper supports/hangers from ceiling/wall as required at site & approved by consultant & duly insulated with 6 mm thick nitrile as per standard specifications				
	Liquid line for 2.0 TR & 1.5 TR HWM units	Rmt	40		
	Suction line for 2.0 TR & 1.5 TR HWM units	Rmt	40		
6	Extruded aluminum powder coated continuous grills of suitable color suits to the gypsum ceiling as suggesed by Engineer in charge	Sqm	10.5		
7	Supply and Fixing of opencil acoustic insulation of duct with 10 mm thk. Nitrile Rubber for Accoustic as per standard practice	Sqmt	25		
8	Supply and Fixing of closedcel thermal insulation of duct with 13 mm thk. Nitrile Rubber for Thermal as per standard practice	Sqmt	60		
9	Supply and Fixing of 2 mm thick Hard PVC drain piping with suitable supports as required & insulated with 6mm thick Nitrile rubber insulation				
	25mm	Rmt	55		

	32mm	Rmt	65		
10	Supply and laying of electrical cabling of Copper 4 core x 6 sqmm interconnecting between indoor and outdoor units as per manufacturer standards for Ductable units	Rmt	75		
11	Supply and laying of electrical cabling of Copper 3 core x 2.5 sqmm interconnecting between indoor and outdoor units as per manufacturer standards for Hi wall units	Rmt	45		
12	Supply and fixing of GI volume control dampers madeout 18 G GI Sheets as per plans	Sqmt	1.5		
13	Supply and fixing of GI fire dampers with fusable link madeout 18 G GI Sheets as per plans	Sqmt	3		
14	Supply and erection of condensor supports with MS angles and making openings in wall, concealing drain pipesand other civil works related to airconditioning works like chipping, drilling, plastering of the surface to a neat finish where ever required .etc for Ductable units	Nos	2		
15	Supply and erection of condensor supports with MS angles and making openings in wall, concealing drain pipesand other civil works related to airconditioning works like chipping, drilling, plastering of the surface to a neat finish where ever required .etc for Hi wall split units	Nos	4		
16	Proper Air balancing for uniform/ proper air distribution in the conditioned area for maintaing the design inside temperature of all the ductable units	Job	1		
18	Supply , testing and fixing of 6/8 Hours timer equal operation scheduler for server room split units	Nos	1		
19	Supply, installation, testing and commissioning of 4 kVA stabilizers	Nos	4		
20	Preparation of ducting layout in auto cad for necessary approval. Upon completion of works, final as built drawing to prepared and submit to the branch and engineer in charge.	Job	1		
	TOTAL AMOUNT LOWSIDE PART B				
	TOTAL AMOUNT (HIGHSIDE A + LOWSIDE B)				

COSTING

DUCTABLE UNITS

Capacity
Basic Price
Less Discount @ 6%
Total
Add Packaging, Insurance, forwarding and freight etc. @ 3.0%
Total
Overhead and Profits @ 5%
Grand Total
OR SAY Rs.

Capacity
Basic Price
Less Discount @ 6%
Total
Add Packaging, Insurance, forwarding and freight etc. @ 3.0%
Total
Overhead and Profits @ 5%
Grand Total
OR SAY Rs.

Hi Wall Split Units

Capacity
Basic Price
Less Discount @ 6%
Total
Add Packaging, Insurance, forwarding and freight etc. @ 3.0%
Total
Overhead and Profits @ 5%
Grand Total
OR SAY Rs.

COOPER PIPE ESTIMATE HARD DRAWN

Pipe Sizes in mm	Price / Rmt	Insulation
22.2	330	88
12.7	180	35
9.5	135	30

COSTING

6.4	85	24
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COOPER PIPE ESTIMATE SOFT DRAWN

Pipe Sizes in mm	Price / Rmt	Insulation
12.7	150	35
6.4	65	24

DUCTING ESTIMATE

Gauge	Price per Sqmt	Supports
22	580	52
24	520	23

GRILLS ESTIMATE

Desription	Price per Rmt	10 % Discount
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Diffuser with Damper

Desription	Price per Pice	10 % Discount
600 mm x 600 mm	1545	1390.5

Diffuser without damper

600 mm x 600 mm	1047	942.3
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Nitrile Rubber Insulation

Desription	Price per Sqmt	10 % Discount
10 mm Accoustic	650	585
13 mm Thermal	380	342
50 mm Underduck	250	225

PVC DRAIN ESTIMATE

PVC Pipe in mm	Price per Rmt	10 % Discount
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COSTING

25	80	72
32	90	81

CONTROL CABLE ESTIMATE

Desription	Price per Rmt	10 % Discount
4 Core x 6 Sqmm	115	103.5
3 Core x 2.5 Sqmm	75	67.5

COSTING

HITACHI	BLUE STAR
11	11
164000	166200
9840	9972
154160	156228
4624.8	4686.84
158784.8	160914.84
7939.24	8045.742
166724.04	168960.582
167000	169000

5.5	5.5
96000	86200
5760	5172
90240	81028
2707.2	2430.84
92947.2	83458.84
4647.36	4172.942
97594.56	87631.782
98000	88000

1.5	1.5
34500	35000
2070	2100
32430	32900
972.9	987
33402.9	33887
1670.145	1694.35
35073.045	35581.35
35000	35600

Labour	Total	Overhead and Profits @ 15%	Grand Total	Round off
111	529	79.35	608.35	610
63.5	278.5	41.775	320.275	320
47.5	212.5	31.875	244.375	245

COSTING

32	141	21.15	162.15	165
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Labour	Total	Overhead and Profits @ 15%	Grand Total	Round off
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63.5	248.5	37.275	285.775	290
32	121	18.15	139.15	140

Labour	Total	Overhead and Profits @ 15%	Grand Total	Round off
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180	812	121.8	933.8	930
140	683	102.45	785.45	790

Labour	Total	Overhead and Profits @ 15%	Grand Total	Round off
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Labour	Total	Overhead and Profits @ 15%	Grand Total	Round off
50	1440.5	216.075	1656.575	1660

50	992.3	148.845	1141.145	1140
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Labour	Total	Overhead and Profits @ 15%	Grand Total	Round off
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85	670	100.5	770.5	770
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85	427	64.05	491.05	495
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110	335	50.25	385.25	390
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Labour+ insulation	Total	Overhead and Profits @ 15%	Grand Total	Round off
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COSTING

40	112	16.8	128.8	130
55	136	20.4	156.4	160

Labour+ PVC Pipe	Total	Overhead and Profits @ 15%	Grand Total	Round off
50	153.5	23.025	176.525	180
50	117.5	17.625	135.125	135