



# Chapter 6

## Results

### 6.1 Technical analyzing

#### 6.1.1 Different RSCL with A/C capacities and operational cost.

material	RSCL per 1000 square feet area	Average Ac capacity (ton)1000 Square Feet Area	Operational cost per annual through 1000 square feet Area per month	construction cost in rupees per 1000 square feet Area	Change in RSCL per 1000 square feet area	Average in change Ac capacity (ton)1000 Square Feet Area
Improved Wall type	45,670.15	4.82	394422.78	416250	0	0
One layer Brick Type	54,623.94	6.14	483661.57	227500	8953.79	1.32
Double Glass	124,191.12	15.88	1268714.44	400000	78520.96	11.05
Plain Glass	172,295.36	17.61	1426854.49	12000	126625.21	12.79



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Table 6.1- A/C and operational cost for different RSCL values.

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Change in A/C due to RSCL Change

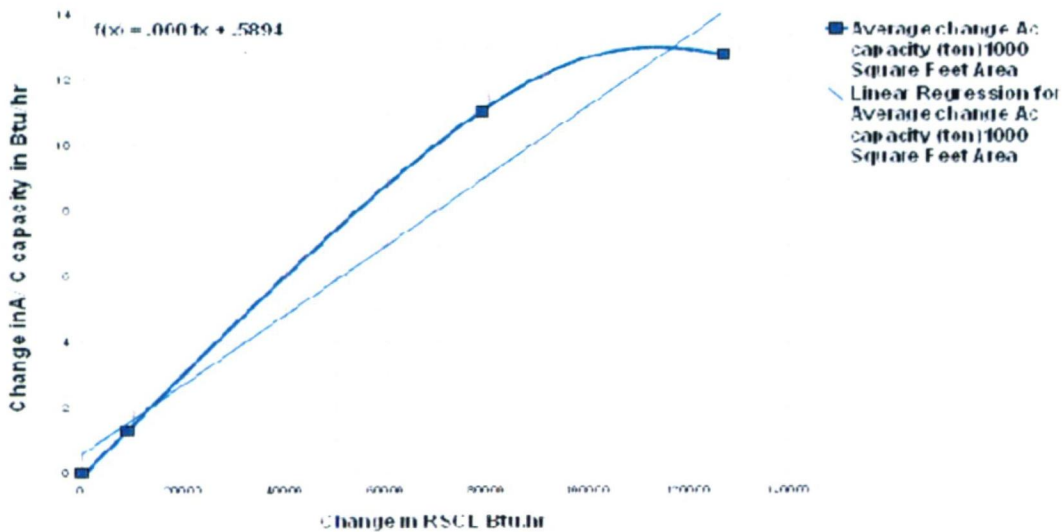


Fig 6.1- Change in A/C due to RSCL change



6.1.2 Total electricity charges per month for different material with RSCL values

		RSCL per 1000 square feet area			4567.02			5462.39			12419.11			17229.54		
		Improved Wall type			One layer Brick Type			Double Glass			Plain Glass					
Customer Category and consumption per month	Equivalent full load hours per month	Average Energy cost (Rs/KWH)	Fixed Charge in Rupees	KVA Charges in Rupees	KWH Charges in Rupees	Total Charges per month in Rupees	KVA Charges in Rupees	KWH Charges in Rupees	Total Charges per month in Rupees	KVA Charges in Rupees	KWH Charges in Rupees	Total Charges per month in Rupees	KVA Charges in Rupees	KWH Charges in Rupees	Total Charges per month in Rupees	
Domestic(D)						0.00			0.00			0.00			0.00	
>180	240	36.00	315.00		62522.81	62837.81		79621.70	79936.70		205743.54	205743.54		228288.84	228603.84	
Religious(R)																
>180	240	9.40	240.00		16325.40	16565.40		20790.11	21030.11		53721.93	53721.93		59608.75	59848.75	
Industry (I)																
I-1	240	10.50	3,000.00		18235.82	21235.82		23223.00	26223.00		60008.53	60008.53		66584.25	69584.25	
I-2	240	10.45	3,000.00	6150.97	18148.98	27299.95	7833.15	23112.41	33945.56	20240.97	59722.78	86114.72	22458.97	66267.18	91726.15	
I-3	240	10.25	3,000.00	5427.33	17801.63	26228.96	6911.61	22670.07	32581.67	17859.68	58579.76	81866.77	19816.74	64998.91	87815.65	
Hotel (H)																
H-1	360	19.50	240.00		50799.78	51039.78		64692.63	64932.63		167166.63	167166.63		185484.68	185724.68	
H-2	720	12.25	3,000.00	6150.97	63825.37	72976.34	7833.15	81280.49	92113.64	20240.97	210029.87	236421.81	22458.97	233044.86	258503.83	
H-3	720	11.99	3,000.00	5427.33	62470.71	70898.04	6911.61	79555.35	89466.96	17859.68	205572.09	228859.10	19816.74	228098.60	250915.34	
General Purpose (GP)																
GP -1	360	19.50	240.00		50799.78	51039.78		64692.63	64932.63		167166.63	167166.63		185484.68	185724.68	
GP -2	720	19.40	3,000.00	6150.97	101078.55	110229.52	7833.15	128721.75	139554.90	20240.97	332618.73	359010.68	22458.97	369066.96	394525.93	
GP -3	720	19.10	3,000.00	5427.33	99515.47	107942.80	6911.61	126731.21	136642.81	17859.68	327475.14	350762.15	19816.74	363359.74	386176.48	

Table 6.2- Total Electricity Charges per month for Different material with RSCL values

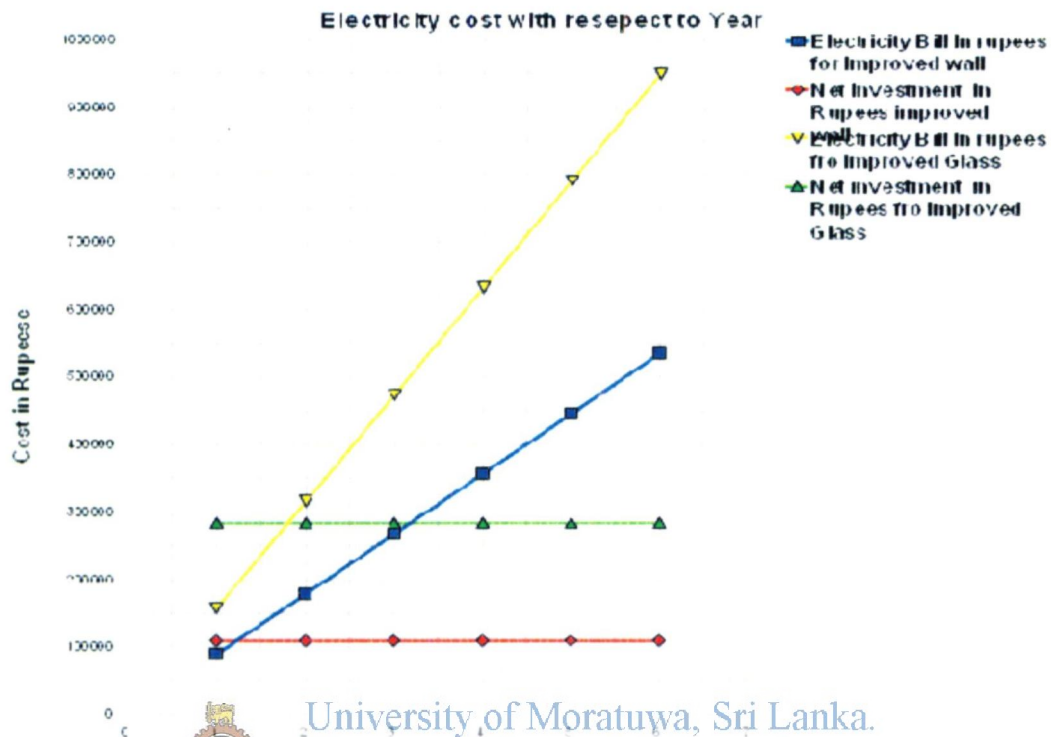


**6.1.3 Total electricity charges per month for different material with RSCL values**

RSCL per 1000 square feet area	Domestic (D) Total Charges per month in Rupees	Religious (R) Total Charges per month in Rupees	Industry (I)			Hotel (H)			General Purpose (GP)		
			I-1 Total Charges per month in Rupees	I-2 Total Charges per month in Rupees	I-3 Total Charges per month in Rupees	H-1 Total Charges per month in Rupees	H-2 Total Charges per month in Rupees	H-3 Total Charges per month in Rupees	GP -1 Total Charges per month in Rupees	GP -2 Total Charges per month in Rupees	GP -3 Total Charges per month in Rupees
45670.15	62837.81	16565.40	21235.82	27299.95	26228.96	51039.78	72976.34	70898.04	51039.78	110229.52	107942.80
54623.94	79936.70	21030.11	26223.00	33945.56	32581.67	64932.63	92113.64	89466.96	64932.63	139554.90	136642.81
124191.12	205743.54	53721.93	60008.53	86114.72	81866.77	167166.63	236421.81	228859.10	167166.63	359010.68	350762.15
172295.36	228603.84	59848.75	69584.25	91726.15	87815.65	185724.68	258503.83	250915.34	185724.68	394525.93	386176.48

**Table 6.3- Total electricity charges for different consumers**





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 Fig 6.3-Net pay back period for both selected glass and wall

No years	Improved Wall		Improved Glass	
	Electricity Bill In rupees for Improved wall	Net investment in Rupees improved wall	Electricity Bill In rupees fro improved Glass	Net investment in Rupees fro improved Glass
1	89238.79	109919.63	158140.04	283803.33
2	178477.57	109920.63	316280.09	283804.33
3	267716.36	109921.63	474420.13	283805.33
4	356955.15	109922.63	632560.18	283806.33
5	446193.93	109923.63	790700.22	283807.33

Table 6.4- Electricity bill and net investment of improved wall and glasses