

GROUND FLOOR (Existing Main Distribution Panel)														
CKT.NO	LOAD DESCRIPTION	NO. OF OUTLETS	VOLTAGE	TOTAL VA	AMP/CKT.	AMP./PHASE			CKT. PROTECTION		SIZE OF WIRE		SIZE OF CONDUIT	
						AB	BC	CA	AT	AF	mm ²	TYPE	mm ²	TYPE
1	Panelboard		230						125	200		THHN		PVC
2	Panelboard - SF		230						125	200		THHN		PVC
3	Panelboard - GF		230						200	200		THHN		PVC
4	Panelboard		230						70	100		THHN		PVC
5	Panelboard		230						100	200		THHN		PVC
6	Panelboard		230						60	200		THHN		PVC
7	Panelboard		230						100	200		THHN		PVC
8	Panelboard		230						100	200		THHN		PVC
Total						102.00	123.00	120.00						

Line Current = (1.73) x 123.00
= 212.79 A

For Feeder Conductor = 1.25 x 212.79 A = 265.99 A
Use 3 - 250mm² THHN cu.wire in 100mm PVC Pipe

For Feeder Protection Use 400AT,500AF, 3Phase 230V, 60Hz, MCCB Bolt on Type

Note: Main line of panelboard and panelboard is existing

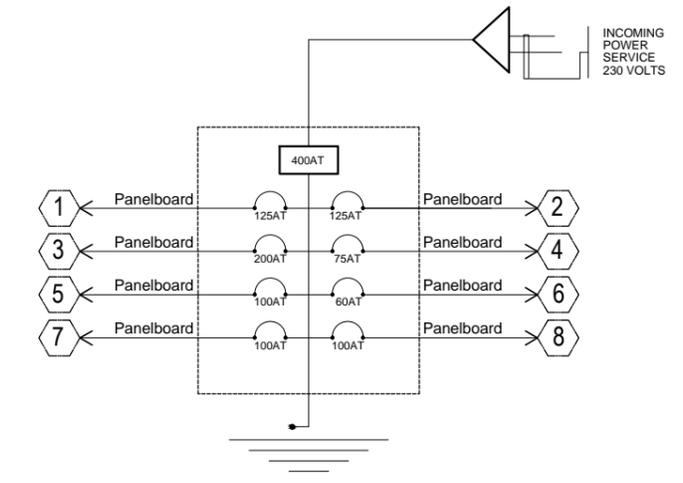
GROUND FLOOR (Proposed Main Distribution Panel)														
CKT.NO	LOAD DESCRIPTION	NO. OF OUTLETS	VOLTAGE	TOTAL VA	AMP/CKT.	AMP./PHASE			CKT. PROTECTION		SIZE OF WIRE		SIZE OF CONDUIT	
						AB	BC	CA	AT	AF	mm ²	TYPE	mm ²	TYPE
1	Panelboard		230						125	200	3-38.0	THHN		PVC
2	Panelboard - SF		230						125	200	3-30.0	THHN		PVC
3	Panelboard - GF		230						200	200	3-80.0	THHN		PVC
4	Panelboard		230						70	100	3-14.0	THHN		PVC
5	Panelboard + Second floor Proposed Panelboard		230						100	200	3-14.0	THHN	32	PVC
6	Panelboard		230						60	200	3-14.0	THHN		PVC
7	Panelboard		230						100	200	3-22.0	THHN		PVC
8	Panelboard		230						100	200	3-22.0	THHN		PVC
Total						169.70	123.00	120.00						

Line Current = (1.73) x 169.70
= 293.58 A

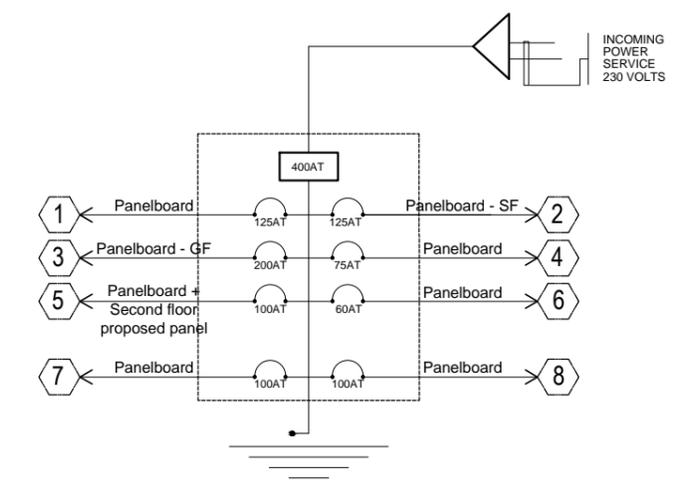
For Feeder Conductor = 1.25 x 293.58 A = 366.98 A
Use 3 - 250mm² THHN cu.wire in 100mm PVC Pipe

For Feeder Protection Use 400AT,500AF, 3Phase 230V, 60Hz, MCCB Bolt on Type

Note: Main line of panelboard and panelboard is existing



E PANEL BOARD DIAGRAM
49 51 NTS MAIN DISTRIBUTION PANEL (EXISTING)



E PANEL BOARD DIAGRAM
49 51 NTS MAIN DISTRIBUTION PANEL (PROPOSED)