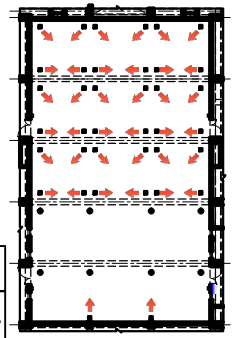
LEGEND OF LIGHTING FIXTURES

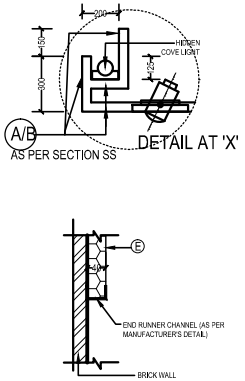
S.NO	SYMBOL IN PLANS	EQ. SYMBOL IN SECTIONS	NOS. USED IN THIS PROPOSAL	DESCRIPTION	COMPANY SPECIFIED/ EQUIVALENT	SIZE	LAMP	CATALOGUE REF. NO.	REMARKS
1			38 NOS.	Ceiling light (recess mounted)- LED TYPE	ENDO / ZUM TOBEL / TRILUX / PHILIPS	135 Ø x 157	1 X R-18 LED MODULE	ENDO GERD 1113W _60_40_37_LED R18R	used in lecture halls
2			08 NOS.	Ceiling light (recess mounted)- LED TYPE	ENDO / ZUM TOBEL / TRILUX/ PHILIPS	330 Ø x 219	1 X R-36 LED MODULE	ENDO GERD 1297W _60_40_75_LED R36R	used in the lecture halls
3			08 NOS.	Ceiling light (recess mounted)- LED TYPE	PHILIPS/ WIPRO/ ENDO	108 Ø x184	LED MODULE	BBG360 6X LXML-10-WWSI	used in the lecture hall below ac duct
4			44 NOS.	Ceiling light (surface mounted)- tubelight	PHILIPS/ WIPRO/ ENDO	1200 x 22.5x 45.3	T 5 14 W	ADRENO- TWG 128 / 2005	used in the lecture hall as cove light
5		S	4 NOS.	RECESSED SPEAKERS	BOSE OR EQUIVALENT	250 Ø OR 200 Ø			used in the lecture hall

LEGEND FOR FALSE CEILING / WALL PANELLING

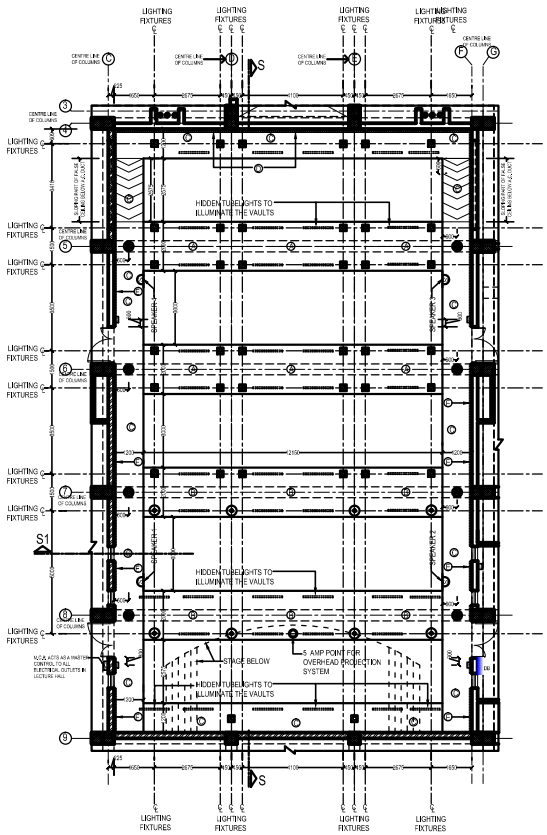
S.NO	DENOTION IN PLANS / SECTIONS	TYPE	GENERAL DESCRIPTION	QUATTIES OF MATERIAL USED IN EACH 252 SEATED LECTURE HALL (QUANTITIES DO NOT ACCOUNT FOR WASTAGES)	SPECIFICATION
1	A	GYPSUM BASED ACOUSTIC CEILING PERFORATED(MAX. 6MM.) BOARDS BACKED WITH ACOUSTIC TISSUE AND LINED WITH ACOUSTIC TISSUE SLEEVE- 0.5 MM. THICK ON EXPOSED SURFACE	THIS SPAN OF VERTICAL FALSE PANELLING SHALL COVER THE SIDES OF ALL A.C. DUCT AND ENDS BELOW THE VAULTS AS SHOWN IN THIS DRAWING.		SUPPLY AND FIXING OF SEAMLESS SUSPENDED CEILING WHICH INCLUDES PERIMETER CHANNELS (HAVING ONE FLANGE OF 30 MM AND ANOTHER FLANGE OF 30 MM AND A WEB OF 27 MM) ALONG THE PERIMETER OF CEILING. SCREW FIXED TO BRICK WALL/PARTITION / R.C.C. BEAM WITH THE HELP OF NYLON SLEEVE AND SCREWS. AT 610 CENTRES, THEN SUSPENDING INTERMEDIATE CHANNELS OF SIZE 45 MM (WITH TWO FLANGES OF 15 MM, EACH) FROM THE SOFFIT AT 1220 MM CENTRES WITH SURFACE RIBBED CEILING ANGLE OF WIDTH 25MMX10MM FIXED TO SOFFIT WITH GI CLEAT AND STEEL EXPANSION FASTNERS, THEN RIBBED CEILING SECTION HAVING WEB OF 51.5 MM AND TWO FLANGES OF 26 MM EACH WITH LIPS OF 10.5 MM ARE THEN FIXED TO THE INTERMEDIATE CHANNEL WITH THE HELP OF CONNECTING CLIP AND IN DIRECTION PERPENDICULAR TO THE INTERMEDIATE CHANNEL AT 457.2MM CENTRES. THE ABOVE GENERIC SPECIFICATIONS FOR CEILING SHALL BE SUITABLY MODIFIED AS PER DRAWING NO. 1001/AL/1058/R1, DT. 30-12-11 WHICH INDICATES SPECIFIC REQUIREMENTS, SIMILARLY FOR WALL PANELLING DRG. NO. 1001/AL/1059/R1, DT. 30-12-11 SHALL BE REFERRED TO.OVER THE APPROPRIATE FRAMEWORK, SINGLE LAYER OF **12.5 MM TAPERED EDGE GYPSUM BOARD (DIMENSIONS = 1210 X 2438 X 12.5 OR EQ.)**, SCREW FIXED TO CEILING SECTION WITH 25 MM DRYWALL SCREWS AT 230 MM CENTRES. FINALLY SQUARE AND TAPERED EDGES OF THE BOARDS ARE TO BE JOINTED AND FINISHED SO AS TO HAVE A PLUSH LOOK WHICH INCLUDES FILLING AND FINISHED WITH JOINTING COMPOUND, JOINT PAPER TAPE AND TWO COATS OF DRYWALL TOP COAT. THE WORK INCLUDES PAINTING THE EXPOSED SURFACE WITH PLASTIC EMULSION PAINT OF DESIRED SHADE AND CREATING ACCESS PANELS OF 600X600 IN AN AREA OF ABOUT 100 SQ.M. EACH WHEREVER REQUIRED **COMPANY = SAINT GOBAIN GYPROC / ANUTONE / LAFARGE PRODUCT EQUIVALENT TO - GYPTONE BB BOARDS - SECTION 2**
2	B	FALSE CEILING OUT OF GYPSUM BOARDS	THIS SPAN OF FALSE CEILING SHALL BE SUSPENDED AT 50 MM. BELOW BEAM BOTTOM LVL. AS SHOWN IN THIS DRG.		SUPPLY AND FIXING OF SEAMLESS SUSPENDED CEILING WHICH INCLUDES PERIMETER CHANNELS (HAVING ONE FLANGE OF 30 MM AND ANOTHER FLANGE OF 30 MM AND A WEB OF 27 MM) ALONG THE PERIMETER OF CEILING. SCREW FIXED TO BRICK WALL/PARTITION WITH THE HELP OF NYLON SLEEVES AND SCREWS. AT 610 CENTRES, THEN SUSPENDING INTERMEDIATE CHANNELS OF SIZE 45 MM (WITH TWO FLANGES OF 15 MM, EACH) FROM THE SOFFIT AT 1220 MM CENTRES WITH SURFACE RIBBED CEILING ANGLE OF WIDTH 25MMX10MM FIXED TO SOFFIT WITH GI CLEAT AND STEEL EXPANSION FASTNERS, THEN RIBBED CEILING SECTION HAVING WEB OF 51.5 MM AND TWO FLANGES OF 26 MM EACH WITH LIPS OF 10.5 MM ARE THEN FIXED TO THE INTERMEDIATE CHANNEL WITH THE HELP OF CONNECTING CLIP AND IN DIRECTION PERPENDICULAR TO THE INTERMEDIATE CHANNEL AT 457.2MM CENTRES. THE ABOVE GENERIC SPECIFICATIONS FOR CEILING SHALL BE SUITABLY MODIFIED AS PER DRAWING NO. 1001/AL/1058/R1, DT. 30-12-11 WHICH INDICATES SPECIFIC REQUIREMENTS.OVER THE APPROPRIATE FRAMEWORK, SINGLE LAYER OF **12.5 MM TAPERED EDGE GYPSUM BOARD (DIMENSIONS = 1210 X 2438 X 12.5 OR EQ.)**, SCREW FIXED TO CEILING SECTION WITH 25 MM DRYWALL SCREWS AT 230 MM CENTRES. FINALLY SQUARE AND TAPERED EDGES OF THE BOARDS ARE TO BE JOINTED AND FINISHED SO AS TO HAVE A PLUSH LOOK WHICH INCLUDES FILLING AND FINISHED WITH JOINTING COMPOUND, JOINT PAPER TAPE AND TWO COATS OF DRYWALL TOP COAT. THE WORK INCLUDES PAINTING THE EXPOSED SURFACE WITH PLASTIC EMULSION PAINT OF DESIRED SHADE AND CREATING ACCESS PANELS OF 600X600 IN AN AREA OF ABOUT 100 SQ.M. EACH WHEREVER REQUIRED **COMPANY = SAINT GOBAIN GYPROC / ARMSTRONG/ LAFARGE PRODUCT EQUIVALENT TO ' SAINT GOBAIN GYPROC = GYPBOARD PLAIN'**
3	C	FALSE CEILING OUT OF GYPSUM BOARDS	THIS FALSE CEILING IS USED TO COVER THE AC. DUCTS FROM BELOW. THE DIMENSIONS, LVLS AND OTHER DETAILS SHALL BE AS SHOWN IN THIS DRG. OR AS PER THE DRGS OF A.C. DUCTING		SUPPLY AND FIXING OF SEAMLESS SUSPENDED CEILING, WHICH INCLUDES PERIMETER CHANNELS (HAVING ONE FLANGE OF 30 MM AND ANOTHER FLANGE OF 30 MM AND A WEB OF 27 MM) ALONG THE PERIMETER OF CEILING. SCREW FIXED TO BRICK WALL/PARTITION WITH THE HELP OF NYLON SLEEVES AND SCREWS. AT 610 CENTRES, THEN SUSPENDING INTERMEDIATE CHANNELS OF SIZE 45 MM (WITH TWO FLANGES OF 15 MM, EACH) FROM THE SOFFIT AT 1220 MM CENTRES WITH SURFACE RIBBED CEILING ANGLE OF WIDTH 25MMX10MM FIXED TO SOFFIT WITH GI CLEAT AND STEEL EXPANSION FASTNERS, THEN RIBBED CEILING SECTION HAVING WEB OF 51.5 MM AND TWO FLANGES OF 26 MM EACH WITH LIPS OF 10.5 MM ARE THEN FIXED TO THE INTERMEDIATE CHANNEL WITH THE HELP OF CONNECTING CLIP AND IN DIRECTION PERPENDICULAR TO THE INTERMEDIATE CHANNEL AT 457.5MM CENTRES. THE ABOVE GENERIC SPECIFICATIONS FOR CEILING SHALL BE SUITABLY MODIFIED AS PER DRAWING NO. 1001/AL/1058/R1, DT. 30-12-11 WHICH INDICATES SPECIFIC REQUIREMENTS.OVER THE APPROPRIATE FRAMEWORK, SINGLE LAYER OF **12.5 MM TAPERED EDGE GYPSUM BOARD LAMNATED ON BACK SIDE WITH METAL FOIL (DIMENSIONS = 1210 X 2438 X 12.5 OR EQ.)**, THEN SCREW FIXED TO CEILING SECTION WITH 25 MM DRYWALL SCREWS AT 230 MM CENTRES. FINALLY SQUARE AND TAPERED EDGES OF THE BOARDS ARE TO BE JOINTED AND FINISHED SO AS TO HAVE A PLUSH LOOK WHICH INCLUDES FILLING AND FINISHED WITH JOINTING COMPOUND, JOINT PAPER TAPE AND TWO COATS OF DRYWALL TOP COAT. THE WORK INCLUDES PAINTING THE EXPOSED SURFACE WITH PLASTIC EMULSION PAINT OF DESIRED SHADE AND CREATING ACCESS PANELS OF 600X600 IN AN AREA OF ABOUT 100 SQ.M. EACH WHEREVER REQ. **COMPANY = SAINT GOBAIN GYPROC / ARMSTRONG/ LAFARGE PRODUCT EQUIVALENT TO ' SAINT GOBAIN GYPROC = GYPBOARD FOIL BACK**
4	D	WALL PANELLING OUT OF ACOUSTIC WALL PANELLING SYSTEM	THE BACK WALL OF EACH 252 SEATED LECTURE HALL SHALL BE TREATED WITH THIS ACOUSTIC WALL PANELLING SYSTEM AS SHOWN IN THIS DRG.		COMPANY = SAINT GOBAIN ECOPHON / LAFARGE EQ. PRODUCT FROM SAINT GOBAIN ECOPHON= WALL PANEL C / TEXONA , OVERALL DEPTH OF SYS. = 40 MM SIZE OF EACH PANEL (TYPE C) IS 2700 X 600 , COLOUR - TRQUOISE 710 APPLICATION = ECOPHON WALL PANEL (OVERALL DEPTH OF SYS. = 40 MM.) SHALL BE INSTALLED DIRECT ON WALL WITH THE HELP OF FLOOR, CEILING, MAIN RUNNER, END RUNNERS, WITH CONNECT CHANNEL. TRIMS SHALL BE FIXED TO FIXING PLATES AS PER THE MANUFACTURER'S DETAIL.
5	E	WALL PANELLING OUT OF ACOUSTIC WALL PANELLING SYSTEM	THE SIDE WALL OF EACH 252 SEATED LECTURE HALL SHALL BE PARTLY TREATED WITH THIS ACOUSTIC WALL PANELLING SYSTEM AS SHOWN IN THIS DRG.		COMPANY = SAINT GOBAIN ECOPHON / LAFARGE EQ. PRODUCT FROM SAINT GOBAIN ECOPHON= WALL PANEL C / TEXONA , OVERALL DEPTH OF SYS. = 40 MM SIZE OF EACH PANEL (TYPE C) IS 2700 X 600 , COLOUR - LIGHT BEIGE 620 APPLICATION = ECOPHON WALL PANEL (OVERALL DEPTH OF SYS. = 40 MM.) SHALL BE INSTALLED DIRECT ON WALL WITH THE HELP OF FLOOR, CEILING, MAIN RUNNER, END RUNNERS, WITH CONNECT CHANNEL. TRIMS SHALL BE FIXED TO FIXING PLATES AS PER THE MANUFACTURER'S DETAIL.
6	**(TO BE USED ONLY IF REQUIRED LATER)**	FALSE CEILING OUT OF SCONZ STRIPS PASTED UPON THE VAULT'S INSIDE SURFACE	THIS SPAN OF FALSE CEILING SHALL COVER THE VAULTED SURFACES ONLY, THEY SHALL BE STUCK/ PASTED TO THE VAULT'S INSIDE SURFACE		ANUTONE SCONZ STRIPS IT' IS AN OPEN CELL ELASTIC MELEMINE FOAM WITH SHARP EDGE AND FOAM FINISH STANDARD LENGTH = 2400 MM., DENSITY 10.5 KG / CU.M., SQUARE SECTION OF 150 X 150 CELL COUNT - 150 - 200 PPI , COLOUR = WHITE IT' SHALL BE PASTED UPON THE VAULT'S INSIDE SURFACE THROUGH ANUTONE STICK S7 ADHESIVE FIRE RATING: CLASS-1 AS PER ASTM- E84, NFPA255 AND UL 1715 CERTIFIED.



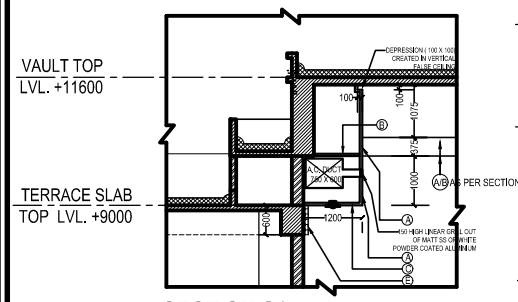
KEY PLAN (SHOWING DIRECTION OF THE ADJUSTABLE FIXTURES)



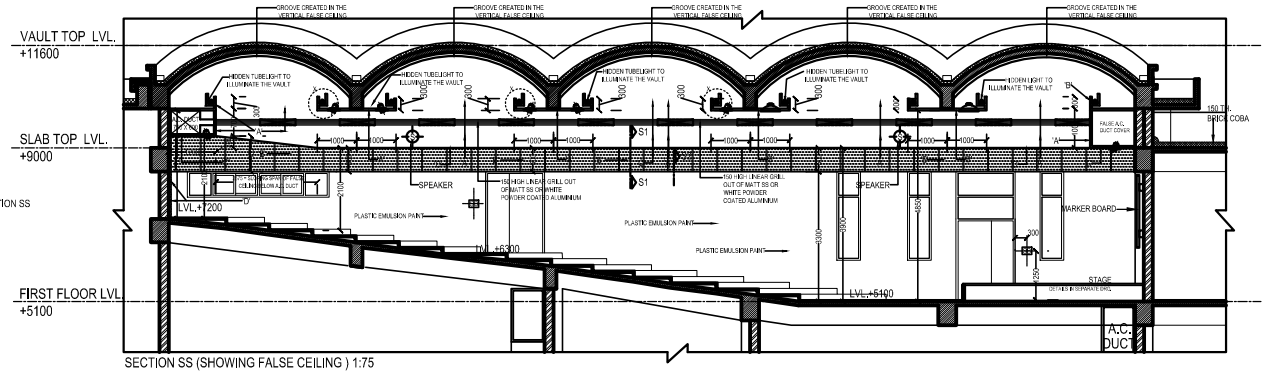
SECTION S2



INVERTED CEILING PLAN (SHOWING FALSE CEILING) 1:120
LECTURE HALL - 5 (252 SEATS)
14550 X 24550



SECTION S1



SECTION SS (SHOWING FALSE CEILING) 1:75
LECTURE HALL - 5 (252 SEATS)

NOTES

1. ALL DIM. ARE IN MM.
2. WRITTEN DIM. SHALL BE FOLLOWED.
3. ANY DISCREPANCY IN THIS DRG. SHALL BE BROUGHT TO THE NOTICE OF THE ARCHITECT.
4. AS PER COUNCIL OF ARCHITECTURE ACT 1972 PASSED BY PARLIAMENT THE DRG. IS THE PROPERTY OF THE ARCHITECT AND SHALL NOT BE USED REPRODUCED FOR ANYPURPOSE OTHER THAN THE PRESENT USE.
5. BRAND NAMES & CATALOGUE NO. OF SPECIFIC LIGHT FIXTURES APPROVED BY IISER HAVE BEEN GIVEN TO IDENTIFY THE TYPE SUITABLE FOR LIGHTING. BRAND NAMES OF EQUIVALENT COMPANIES HAVE ALSO BEEN GIVEN.
6. ALL LIGHTS IN ALL LECTURE HALLS SHALL BE CONTROLLED THROUGH MCBS. AT THE SELECTED EXITS TO FACILITATE EASY CONTROL FOR SWITCHING LIGHTS ON AND OFF.REFER DRG. NO. 1001/EL/1001-1002/R4, DATED: 20-06-11
7. THE DRAWING SHOWS EXACT POSITION OF LIGHTING FIXTURES. THE LIGHTING FIXTURES SHALL BE INTEGRATED WITH THE FALSE CEILING BY THE AGENCY WHICH WILL DO FALSE CEILING & ACOUSTIC PANELLING WORK.
8. THIS PART DRAWING OF 252 SEATED HALL IS EXTRACT OF ELECTRICAL DRAWING NO. 1001/EL/1001-1002/R4, DATED: 20-06-11, WITH REVISION OF LIGHTING FIXTURES & OTHER INPUTS LIKE SPEAKERS LOCATED ON INSTRUCTIONS FOM THE INSTITUTE.
9. FOR THE DETAIL OF STAGE SEPARATE DRGS SHALL BE REFERRED.
10. FOR ELECTRICAL LAYOUT REFER DRG. NO. 1001/EL/1001-1002/R4, DATED: 20-06-11
11. THE LOWER END DRAWINGS OF A.C. HAVE BEEN RECIEVED FROM USER WHICH SPECIFY THE SIZES OF A.C. DUCTS AND CUTOUT REQ. FOR THE SAME IN WALL . THE DRAWING NOS. ARE AS FOLLOWS.
   - 1001 / AC / 1005/ R0 , DATED : 14-05-11
   - 1001 / AC / 1006/ R1 , DATED : 27-05-11
   - 1001 / AC / 1007/ R0 , DATED : 14-05-11
   - 1001 / AC / 1008/ R1 , DATED : 27-05-11

   ALL OTHER DETAILS REGARDING THE AC DUCTING SHALL BE REFERRED FROM THE ABOVE MENTIONED DRG. NOS.
12. AS DISCUSSED IN MEETING ON 13-06-11 THE SOUND REINFORCEMENT SYS. SHALL BE SPECIFIED BY THE INSTITUTE. LOCATION AND WIRING HAS BEEN SHOWN IN DRG. NO. 1001/EL/1001-1002/R4, DATED: 20-06-11. THE SPEAKERS SHALL BE FITTED WITH SWIVEL BRACKETS WHEREVER REQUIRED. ALL SPEAKERS SHALL BE PROVIDED WITH INDIVIDUAL BALANCE CONTROL SYSTEM.
13. FOR CONTROL OF LIGHTING & OTHER ELECTRICAL PROVISIONS REFER DRAWING NO. 1001/EL/1001-1002/R4, DATED: 20-06-11
14. THE CONCEPT , LIGHTING FIXTURES, & ACOUSTIC MATERIALS WERE APPROVED BY INSTITUTE ON 13-06-11.
15. THE LIGHTING AND SOUND SYSTEM IN THE HALL SHALL BE CONNECTED THROUGH INVERTER ALSO.

REV. NO	DATE	REVISIONS
R5	14-02-12	DRG. CO-ORDINATED WITH N.L.T. DOCUMENT
R4	25-07-11	BOQ OF ACOUSTIC MATERIALS ADDED (QUANTITIES DO NOT ACCOUNT FOR WASTAGES)
R3	20-06-11	RELEASED AS REVISED G.F.C.
R2	30-05-11	DRGS MODIFIED AS PER THE DRGS. OF A.C. DUCTING
R1	11-04-11	1. LIGHTING PLAN MODIFIED AS FAR AS DIRECTION OF ADJUSTABLE LED LIGHT IS CONCERNED 2. EARLIER PROPOSED METAL FALSE CEILING ELIMINATED 3. NO. OF COVE LIGHTS INCREASED AS PER THE SUGGESTIONS OF C.P.W.D. IN MEETING HELD ON 26-03-11

PROJECT:

INDIAN INSTITUTE OF SCIENCE EDUCATION & RESEARCH AT MOHALI, PUNJAB

BUILDING :

LECTURE HALL COMPLEX

DRAWING TITLE :
TYPICAL LIGHTING AND FALSE CEILING DETAIL OF 252 SEATED LECTURE HALL

NORTH	DATE	DRAWING NO.
	03/02/11	1001/AL/1045/R5
	SCALE	
	AS SHOWN	

ARCHITECT- D.S.BHUI

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