PROJECT DESCRIPTION CONTINUED FROM SHEET 1

THE DESIGNS INCORPORATE FEATURES FOR THE MINIMUM THREAT LEVEL. IF GREATER LEVELS OF THREAT ARE DEFINED BY THE INSTALLATION / MACOM, USE THE APPROPRIATE CRITERIA AS A GUIDE IN SELECTING SECURITY MEASURES REQUIRED TO RESIST THE THREAT IN TERMS OF TACTICS, TOOLS, WEAPONS AND EXPLOSIVES.

SITE DEVELOPMENT

VARIOUS POSSIBILITIES EXIST FOR THE SITING OF THESE FACILITIES. SEVERAL SITE DIAGRAMS FOR EACH SCHEME ARE PROVIDED TO ILLUSTRATE THE DESIGN INTENT. THE FACILITIES SHOULD ALWAYS BE LOCATED SO THAT THE MAIN ENTRANCE IS READILY VISIBLE FROM THE PRIMARY ACCESS TO THE SITE. THE MAIN ENTRANCE SHOULD BE LOCATED ADJACENT TO THE MAIN PARKING AREA AND THE MAIN PEDESTRIAN ACCESS TO THE SITE. ADDITIONAL VEHICULAR PARKING IS NOT REQUIRED FOR THESE FACILITIES IF ADEQUATE PARKING IS AVAILABLE FOR THE ADJACENT WORSHIP FACILITY.

PROPER LANDSCAPING SHOULD BE DEVELOPED AROUND THE BUILDING. AS MOST OF THE OFFICES AND CLASSROOMS ARE LOCATED ALONG THE EXTERIOR WALLS OF THE BUILDING, GREEN SPACE NEAR THE BUILDING IS AN IMPORTANT CONSIDERATION. ADEQUATE LANDSCAPING IS TO BE PROVIDED FOR OTHER AREAS OF THE SITE AS WELL. LOW MAINTENANCE PLANT MATERIALS THAT ARE INDIGENOUS TO THE REGION ARE TO BE SPECIFIED. ADEQUATE GRADING AND SITE DRAINAGE ARE REQUIRED TO AVOID PROBLEMS ASSOCIATED WITH HEAVY RAINFALL OR SNOW MELTING. PLANTINGS SHALL BE KEPT AWAY FROM ENTRANCES AND WINDOWS A SUFFICIENT DISTANCE TO AVOID POTENTIAL SECURITY PROBLEMS.

ARCHITECTURAL DESIGN

THE FUNDAMENTAL DESIGN CRITERION IS TO PROVIDE SUPPLEMENTAL RELIGIOUS EDUCATION FACILITIES WHICH ARE COMPATIBLE IN APPEARANCE WITH EITHER THE EXISTING OR A NEW STANDARD SMALL CHAPEL IT IS DESIGNED TO COMPLEMENT. VARIOUS EXTERIOR ELEVATION DESIGNS ARE SUGGESTED HEREIN, BASED UPON COMMONLY FOUND CHAPELS THROUGHOUT THE ARMY. IT IS RECOGNIZED THAT OTHER CHAPEL DESIGNS EXIST AND EVERY EFFORT SHOULD BE MADE TO PROVIDE A FACILITY WHICH COMPLEMENTS THE EXISTING CHAPEL.

ALL INTERIOR DESIGN ELEMENTS WILL BE HIGH QUALITY, FUNCTIONAL, EASILY MAINTAINED AND FLEXIBLE. IT IS OF UTMOST IMPORTANCE TO CREATE A WARM AND COMFORTABLE ENVIRONMENT THROUGH THE GENEROUS USE OF WOOD AND APPROPRIATE COLORS. COLORS, FINISHES AND FURNISHINGS MUST BE COORDINATED THROUGHOUT THE BUILDING SO THAT FURNITURE CAN BE USED IN VARIOUS SPACES.

CLASSROOMS

CLASSROOMS ARE SIZED TO ACCOMMODATE GROUPS OF 5 TO 30 PERSONS OF VARIOUS AGE GROUPS. FLEXIBILITY IN USAGE IS PROVIDED BY FOLDING PARTITIONS WHICH ALLOW GROUPS OF LARGER SIZES TO ASSEMBLE FOR SPECIAL EVENTS.

KITCHEN

A KITCHEN FACILITY IS LOCATED ADJACENT TO THE ASSEMBLY SPACE IN ORDER TO PROVIDE EASY ACCESS TO FOOD SERVICE. RESIDENTIAL TYPE KITCHEN EQUIPMENT AND A COMMERCIAL HOOD / EXHAUST SYSTEM SHALL BE PROVIDED., ALTHOUGH A COMMERCIAL QUALITY COOKING RANGE MAY BE USED IN LIU OF A RESIDENTIAL TYPE. KITCHEN SIZE PANTRY, QUANTITY, AND OTHER FEATURE REQUIREMENTS MAY VARY WIDELY FOR EACH PROJECT. MODIFY AS NECESSARY TO MEET THE ACTUAL NEEDS.

ASSEMBLY AREA

IN ALL SCHEMES, AN ASSEMBLY AREA IS PROVIDED FOR GROUP FELLOWSHIP ACTIVITIES. THIS ASSEMBLY SPACE IS PROVIDED IN SCHEMES A AND B BY STORING ALL FOLDING PARTITIONS. SCHEME C HAS A DEDICATED ASSEMBLY AREA WHICH ALSO SERVES AS A LARGE CLASSROOM.

SYSTEM DESIGN

STRUCTURAL

THE STRUCTURAL SYSTEM WILL MOST LIKELY CONSIST OF A CAST-IN-PLACE CONCRETE FOUNDATION, STRUCTURAL STEEL SKELETON AND OPEN WEB JOISTS AND LIGHT GAUGE METAL FRAMING, AND STEEL ROOF DECK. OTHER NON-COMBUSTIBLE STRUCTURAL SYSTEMS MAY BE USED WHICH MEET THE REQUIREMENTS OF THE CRITERIA PACKAGE PROVIDED FOR EACH PROJECT.

MECHANICAL

GEOGRAPHIC LOCATION AND CLIMATE SHALL DETERMINE THE BASIC REQUIREMENTS FOR HEATING AND COOLING. SELECTION OF ENERGY SOURCES FOR HEATING AND COOLING SHALL BE BASED ON LOCAL AVAILABILITY AND LIFE CYCLE COST.

REQUIREMENTS FOR HEATING, VENTILATION AND AIR CONDITIONING (HVAC) SYSTEMS SHALL BE DETERMINED BY THE CRITERIA PACKAGE PROVIDED FOR THE SPECIFIC PROJECT. LIFE CYCLE COST SHALL DETERMINE THE MOST APPROPRIATE HVAC SYSTEM. ANNUAL ENERGY USE FOR THE FACILITY SHALL MEET THE PROVIDED ENERGY BUDGET. SPECIFIC WEATHER DATA TO DESIGN TO WILL BE PROVIDED AS PART OF THE PROJECT CRITERIA.

ALL MECHANICAL SYSTEMS, INCLUDING DUCTWORK, GRILLES AND DIFFUSERS, SHOULD BE AS WELL CONCEALED AS POSSIBLE. HVAC CONTROLS SHALL BE IN ACCORDANCE WITH CRITERIA. SPACE THERMOSTATS, WHILE ACCESSIBLE TO THE STAFF, ARE TO BE PROVIDED WITH LOCKABLE COVERS AND LOCATED AS REQUIRED TO ACCURATELY SENSE SPACE CONDITIONS BUT OUT OF PUBLIC VIEW TO THE MAXIMUM EXTENT. SEPARATE ZONED TEMPERATURE CONTROL SHOULD, AT A MINIMUM, BE PROVIDED IN THE CLASSROOM AREAS AND THE OFFICES. ADEQUATE EXHAUST WILL BE PROVIDED IN THE TOILETS, KITCHEN AND SERVICE CLOSETS. NOISE SHALL ALSO BE CONTROLLED ACCORDING TO THE PROVIDED CRITERIA.

THE MECHANICAL EQUIPMENT SHALL BE HOUSED IN A SEPARATE SPACE WITH DIRECT EXTERIOR ACCESS SUFFICIENT FOR THE REMOVAL AND MAINTENANCE OF THE INSTALLED EQUIPMENT. MECHANICAL/ELECTRICAL ROOMS ARE NOT TO BE USED FOR ANY OTHER PURPOSES UNLESS AGREED TO BY THE APPROPRIATE MECHANICAL/ELECTRICAL DESIGNERS.

ALL EXTERIOR ON-GRADE MECHANICAL AND ELECTRICAL EQUIPMENT SHALL BE LOCATED WITHIN AN ENCLOSED AREA. ACCESS AROUND EQUIPMENT SHALL BE PROVIDED FOR SERVICE AND AIR FLOW.

PLUMBING

PLUMBING FIXTURE QUANTITIES ARE BASED ON THE ASSUMPTION THAT THE RELIGIOUS EDUCATION FACILITIES ARE SUPPORT FACILITIES FOR A CHAPEL. THE DURATION OF USAGE IS RELATIVELY SHORT, USUALLY AROUND TWO TO THREE HOURS AT A TIME. FIXTURE REQUIREMENTS SHOWN ARE FROM CURRENT APPLICABLE CRITERIA.

UNDERGROUND DOMESTIC WATER SUPPLY, STORM AND SANITARY SEWERS ARE REQUIRED. TOILET FACILITIES, KITCHEN AND FLOOR DRAINS MAKE UP THE MAJORITY OF THE PLUMBING REQUIREMENTS IN THIS FACILITY. A DOMESTIC HOT WATER HEATER FOR THE KITCHEN AND SINKS IS TO BE PROVIDED. EXTERIOR WATER SUPPLY FOR LANDSCAPE MAY BE CONSIDERED IN APPROPRIATE CLIMATES.

PLUMBING REQUIREMENTS ARE TO BE IN ACCORDANCE WITH THE CRITERIA PACKAGE PROVIDED WITH THE SPECIFIC PROJECT.

FIRE PROTECTION AND EMERGENCY LIGHTING

THE FACILITY SHALL HAVE A FIRE ALARM EVACUATION SYSTEM WITH MANUAL PULL STATIONS AND AUDIO/VISUAL ALARMS EMERGENCY LIGHTING AND NIGHT LIGHTING ARE ESSENTIAL. EMERGENCY AND EXIT ACCESS WAY LIGHTING SHOULD BE ON THE INSTALLATION EMERGENCY POWER SYSTEM OR HAVE BATTERY BACKUP. ALL LIFE SAFETY SIGNAGE AS REQUIRED BY NFPA 101 LIFE SAFETY CODE IS TO BE INCLUDED IN DESIGNS. KITCHEN EQUIPMENT INSTALLATION SHALL COMPLY WITH APPLICABLE CRITERIA.

ELECTRICAL

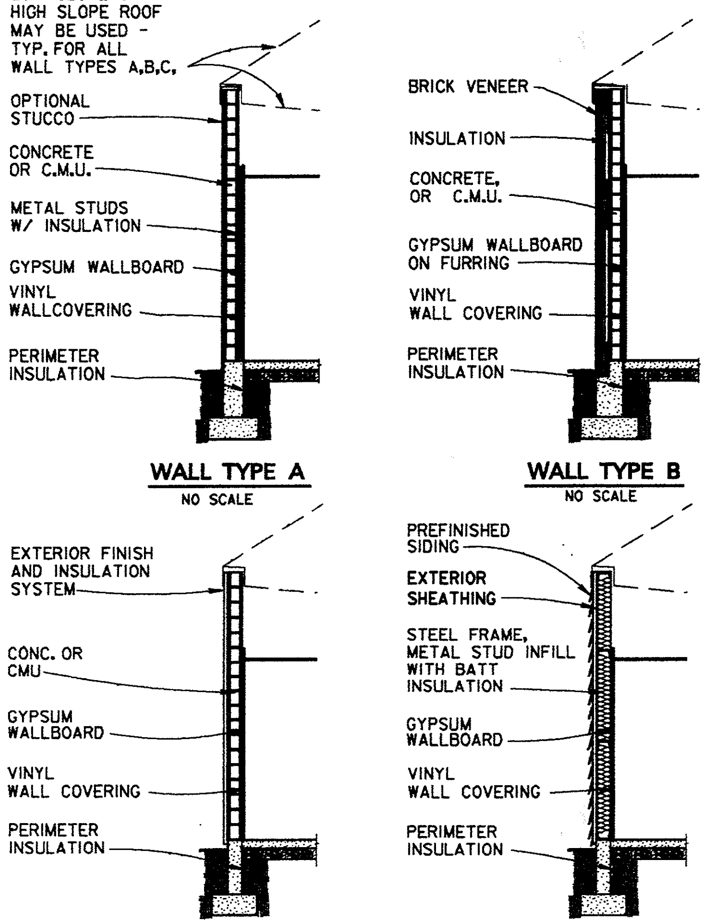
THE ELECTRICAL REQUIREMENTS WILL CONSIST OF LIGHTING, POWER, FIRE ALARM AND DETECTION, TELEPHONE, INTERCOM, PA AND OTHER AUXILIARY SYSTEMS AS INDICATED. LIGHTNING AND CATHODIC PROTECTION SYSTEMS WILL BE PROVIDED AS REQUIRED BY THE GEOGRAPHICAL LOCATION AND SOIL CORROSIVITY.

THE ELECTRICAL DESIGN SHALL MEET REQUIREMENTS OF THE PROJECT CRITERIA, INCLUDING APPLICABLE TECHNICAL MANUALS AND STANDARD LIGHTING FIXTURE DETAILS, ETC. WIRING SYSTEMS SHALL CONSIST OF INSULATED CONDUCTORS INSTALLED IN METAL RACEWAYS. LIGHTING WITHIN THIS FACILITY WILL MEET THE PROJECT CRITERIA. SPECIAL OR ALTERNATIVE LIGHTING TYPES MAY BE USED IN THE ASSEMBLY AREAS. AS A MINIMUM THE ELECTRICAL DESIGN WILL BE BASED ON THE SAFETY STANDARDS OF THE APPLICABLE NATIONAL AND NFPA CODES

ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN SEPARATE DESIGNATED ELECTRICAL/ELECTRONIC EQUIPMENT ROOMS WITH SEPARATE EXTERIOR ACCESS.

ELECTRICAL SERVICE TO THIS FACILITY SHALL BE UNDERGROUND IF POSSIBLE. EXTERIOR LIGHTING SHALL BE PROVIDED FOR PARKING, PEDESTRIAN WALKWAYS AND ALL EXTERIOR BUILDING ENTRANCES, PER PROJECT CRITERIA AND INSTALLATION DESIGN GUIDELINES.

CONTINUED ON SHEET 18



WALL TYPE A NO SCALE

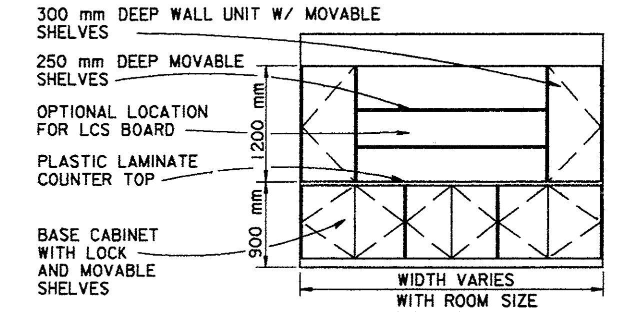
WALL TYPE B NO SCALE

WALL TYPE C NO SCALE

WALL TYPE D NO SCALE

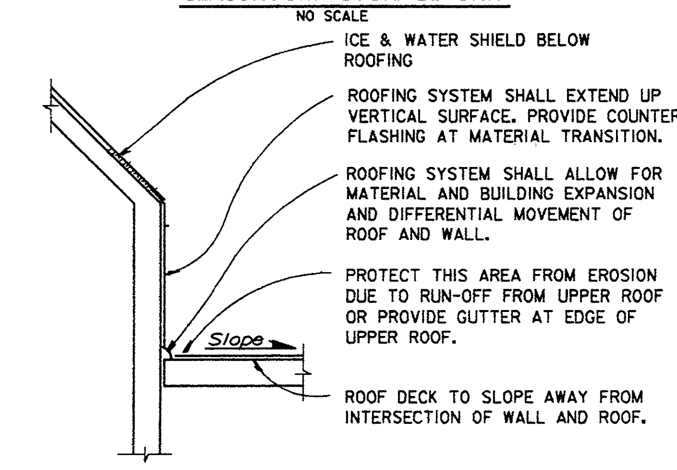
EXTERIOR WALL SECTIONS

NOTE: WALL & ROOF SECTION R VALUES SHALL BE DETERMINED BY GEOGRAPHIC LOCATION



INTERIOR ELEVATION OF CLASSROOM STORAGE UNIT

NO SCALE



TYPICAL DETAIL AT CHANGE IN ROOF ELEVATION

NO SCALE

NOTE:
PROVIDE OVERFLOW DRAINS OR SCUPPERS IN ALL LOW-SLOPE ROOF AREAS TO PREVENT WATER BUILD-UP DUE TO ACCIDENTAL OBSTRUCTION OF ROOF DRAINS.

US Army Corps of Engineers
Omaha District

Approved Function of Adequacy | Date:
Subcommittee Chairman
Prepared by
US ARMY CORPS OF ENGINEERS HUNTSVILLE DIVISION HUNTSVILLE, ALABAMA
Chief, Design | Date:
Recommended by | Date:
Director of Engineering
Recommended by | Date:
Division Engineer, CEHND-DE
Recommended by
Chairman, USACE Std Committee | Date:
Approved by | Date:
USACE Director of Mil. Prog.
Approved by
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DEPARTMENT OF THE ARMY
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RELIGIOUS EDUCATION FACILITIES
PROJECT DESCRIPTION & DETAILS