

STATE OF LOUISIANA
Department of Public Safety and Corrections
Office of State Fire Marshal Code Enforcement and Building Safety
8181 Independence Boulevard
Baton Rouge, Louisiana 70806
225-925-4920

PAUL SMITH
FIRE MARSHAL

NOT IN COMPLIANCE

EDWARD GREMILLION, P E, C E
EDWARD C GREMILLION
P O BOX 117715
SLIDELL, LA 70459

RE: P0329265
ALDRSGATE UNITED METHODIST CHURCH
360 ROBERT ROAD
SLIDELL, LA 70458-0000

NFPA 101, 2003

EDUCATIONAL
ASSEMBLY OVER 300 OCCUPANTS

NOT-IN-COMPLIANCE
OFFICE OF STATE FIRE MARSHAL

Dear Applicant:

Drawings and/or specifications for the subject proposed project do not comply with the requirements for The Fire Marshal Act and are herewith returned to you for correction and clarification of the following items:

1. This review was found **NOT IN COMPLIANCE** due to deficiencies cited as Item(s) in this letter. This review applies to the following scope of work:

Architectural New Construction

The last statement in this letter, referencing "Construction shall not commence..." is limited to the scope of work as qualified above.

Return the original review documents stamped **NOT IN COMPLIANCE** with your re-submittal package, Plan Review Application and **FULL** review fee.

2. This work entails the construction of a new building and the associated site development.
 - a) The building appears to be intended to comply as a Multiple / Separated occupancy in accordance with 101:6.1.14.3. HOWEVER THE MIXED EGRESS OF CLASSROOM 103 INTO THE ASSEMBLY MAIN ENTRY, AND REQUIRED EXIT FROM HALL 110 INTO THE ASSEMBLY OCCUPANCY, TO AVOID EXCESSIVE DEAD END LIMITS, REQUIRES THE PROJECT BE CONSIDERED MULTIPLE / MIXED OCCUPANCY IN ACCORDANCE WITH 6.1.14.4.
 - 1 101:6.1.14.3 Where two or more classes of occupancy occur in the same building or structure and are intermingled so that separate safeguards are impracticable, means of egress facilities, construction, protection, and other safeguards shall comply with the most restrictive life safety requirements of the occupancies involved.
 - b) Although reviewed for occupancy at the first floor spaces; this review is for shell only, FOR THE SECOND FLOOR ONLY, until completion of drawings for final submittal of this area, as there is

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not sufficient information for final review. Construction may commence at your own risk and any revisions required for compliance with code (including any work in place) shall be the responsibility of the Owner and/or Professional of Record, if applicable. All subsequent reviews shall include either an overall floor plan, key plan, or tabular information indicating all currently occupied / unoccupied spaces in the overall building.

3. LRS 40:1730.45 and LAC 55:V:2601 The documentation provided for the subject facility appears to comply with The Commercial Building Energy Conservation Code based on ANSI/ASHRAE/IESNA 90.1- 2004, or the International Energy Conservation Code, 2006 edition, as applicable.

NOTE: THE COMMENTS LISTED BELOW IDENTIFY APPARENT DEFICIENCIES DETECTED IN OUR REVIEW OF THE DOCUMENTS SUBMITTED.

4. **8.3.3.1 Wall openings** required to have a fire protection rating by Table 8.3.4.2 shall be protected by approved, listed, labeled fire door assemblies and fire window assemblies and their accompanying hardware, including all frames, closing devices, anchorage, and sills in accordance with the requirements of NFPA 80, Standard for Fire Doors and Fire Windows, except as otherwise specified in this Code.
 - a) **Provide 90 minute fire protection of openings in 2 hour fire barriers in accordance with Table 8.3.4.2. THE 60 MINUTE RATED DOORS SCHEDULED ARE NOT SUFFICIENT TO COMPLY.**
 - b) **GLASS DOORS SCHEDULED IN 2 HOUR FIRE BARRIER MARKED "1", EXCEED THE LIMIT OF GLAZED AREA ALLOWED IN NFPA 80. DOCUMENT THE LISTING FOR THIS DOOR, TESTED WITH THE GLAZING PROPOSED.**
 - c) **80:2-4.4.3 All single doors and active leaves of pairs of doors shall be provided with an active latch bolt that cannot be held in a retracted position, as specified in Table 2-4.4.3. Inactive leaves of pairs of doors shall be fitted with bolts at the tops and bottoms of the doors. REQUIRED BOLTS ARE NOT SCHEDULED IN THE SUBMITTAL AT DOOR MARKED "1".**
 - d) **80:2-4.4.4 Where both leaves of a pair of doors are required for exit purposes, they shall be provided with labeled fire exit hardware. DOOR MARKED "1" TO ENTRY (104) SHALL COMPLY.**
5. **14.2.3.2 Exit access corridors shall have not less than 6 feet of clear width. THE PROPOSED CORRIDOR WIDTHS RANGING FROM 4'-6" TO 5'-4" DO NOT COMPLY.**
6. **Corridor doors shall be 20 minute fire rated, minimum, in accordance with Table 101:8.3.4.2. PROPOSED DOOR SCHEDULE DOES NOT INDICATE COMPLIANT FIRE RATINGS.**
7. **101:14.3.2 Separate PANTRIES 118, & 122, AND BROOM CLOSET 119 from other parts of the building by 1 hour fire resistive construction with self-closing 45 minute labeled door/frame assembly or provide automatic sprinkler protection in accordance with Section 9.7 and smoke partitions with self-closing doors in accordance with 8.7.1.2 and 8.4. (Sprinkler piping for isolated hazardous areas connected to domestic water supply shall comply with 101:9.7.1.2). THE REQUIRED WALL AND DOOR RATINGS ARE NOT INDICATED IN THE SUBMITTAL.**
8. **101:14.3.2 Separate LAUNDRY from other parts of the building by 1 hour fire resistive construction with self-closing 45 minute labeled door/frame assembly and provide automatic sprinkler protection in accordance with Section 9.7. REQUIRED WALL AND OPENING PROTECTIONS ARE NOT INDICATED IN THE SUBMITTAL.**

9. 101:7.2.1.4.3 Doors used for egress from exit enclosures or high hazard contents areas, such as those marked 5, AT THE DISCHARGE OF STAIR 112, shall swing in the direction of egress travel.

10. 7.1.3.2.1 (6) Penetrations of the exit stair enclosure assembly are limited to the specific conditions listed in this section.

a) PROPOSED PLUMBING PIPING AND TOILET ACCESSORIES MOUNTED ON OR IN THE EXIT ENCLOSURE WALL AT LADIES LOCKER 113 ARE NOT ALLOWED.

b) PROPOSED ELECTRICAL POWER, EMER LIGHTING DEVICES AND LIGHTING SWITCHING NOT SERVING THE EXIT ENCLOSURE ITSELF IS NOT ALLOWED.

11. 101:12.3.4 & 14.3.4 Provide a fire alarm system in accordance with 101:9.6. In facilities required to be fully accessible, alarm notification shall be by both audible and visual means in accordance with NFPA 72.

a) 12.3.4.2.3* In assembly occupancies with occupant loads of more than 300, automatic detection shall be provided in all hazardous areas that are not normally occupied, unless such areas are protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7.

b) 12.3.4.3.3 Occupant notification shall be by means of visible signals and voice announcements, either live or prerecorded, initiated by the person in the constantly attended location.

c) 14.3.4.3.2 Emergency Forces Notification. Fire department notification shall be accomplished in accordance with 9.6.4.

THE CALCULATED OCCUPANT LOAD FOR THE GENERAL USE ASSEMBLY SPACE MUST BE MADE AT THE MOST RESTRICTIVE CASE, WHICH WOULD BE AT CONCENTRATED LOAD WITHOUT SEATING, OR 7 SF/OCCUPANT. AT THIS RATE THE LOAD CALCULATES TO 485 OCCUPANTS.

12. 101:12.3.5.1 Buildings containing assembly occupancies with occupant loads of more than 300 shall be protected by an approved, supervised automatic sprinkler system in accordance with Section 9.7.2

THE CALCULATED OCCUPANT LOAD FOR THE GENERAL USE ASSEMBLY SPACE MUST BE MADE AT THE MOST RESTRICTIVE CASE, WHICH WOULD BE AT CONCENTRATED LOAD WITHOUT SEATING, OR 7 SF/OCCUPANT. AT THIS RATE THE LOAD CALCULATES TO 485 OCCUPANTS.

NOTE: THE FOLLOWING IS A REVIEW FOR COMPLIANCE WITH THE REQUIREMENTS OF THE LOUISIANA STATE UNIFORM CONSTRUCTION CODE IN ACCORDANCE WITH ACT 12 OF THE 2005 FIRST EXTRAORDINARY SESSION OF THE LOUISIANA LEGISLATURE. THIS REVIEW IS PERFORMED AT THE REQUEST OF, AND ON BEHALF OF THE JURISDICTION IN WHICH THIS PROPOSED PROJECT IS LOCATED.

This office will not be responsible for inspections to certify compliance with applicable requirements. Contact the local Building Official or a Louisiana State Uniform Construction Code Council certified third-party provider to arrange for inspections.

Codes Referenced:

2006 International Building Code (IBC) not including Chapters 1, 11, 27, and 29;

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systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system.

THE CALCULATED OCCUPANT LOAD FOR THE GENERAL USE ASSEMBLY SPACE MUST BE MADE AT THE MOST RESTRICTIVE CASE, WHICH WOULD BE AT CONCENTRATED LOAD WITHOUT SEATING, OR 5 SF/OCCUPANT. AT THIS RATE THE LOAD CALCULATES TO 680 OCCUPANTS.

16. **Occupants:**

1) **Means of Egress:**

Refer to Life Safety Code review above for means of egress requirements.

17. **Interior Environment:**

a) Toilet and bathing room floors shall have a smooth, hard, nonabsorbent surface that extends upward onto the walls at least 6 inches per IBC Section 1210.1.

b) Walls within 2 feet of urinals and water closets shall have a smooth, hard, nonabsorbent surface, to a height of 4 feet above the floor, and except for structural elements, the materials used in such walls shall be of a type that is not adversely affected by moisture per IBC Section 1210.2.

18. **Structural:**

THE DESIGN MANUAL AND METHOD USED IN STRUCTURAL DESIGN WAS NOT INDICATED IN THE SUBMITTAL.

a) **Gravity Loads:**

Live loads shall be determined in accordance with IBC 1607.1

CLASSROOMS = 40 PSF

FIRST FLOOR CORRIDORS = 100 PSF

SECOND FLOOR CORRIDORS = 80 PSF

GYMNASIUMS = 100 PSF

ROOF LOAD = 20 PSF

GROUND SNOW LOAD = 5 PSF

Documented design loads appear to comply.

b) **Wind Loads:**

Wind loads shall be determined in accordance with ASCE 7-05.

The basic wind speed of 130 for this site, is correctly indicated.

The occupancy category of III and a wind importance factor of 1.15 are correctly indicated.

Exposure Category B for this site is identified, but cannot be confirmed by this review.

The internal pressure coefficient was NOT identified.

Main Wind-Force Resisting System appears to be braced rigid frame, pre-engineered metal building.
NO BRACING OR STRUCTURAL DETAILS ARE PROVIDED IN THE SUBMITTAL.

Components and cladding **DESIGN PRESSURES ARE NOT INDICATED IN THE SUBMITTAL.**

Protection of openings for wind-borne debris is required. **PROPOSED SHUTTERING IN COMPLIANCE WITH 1609.1.2 IS INDICATED**

Roof deck and covering is **NO INDICATED TO BE** designed in accordance with Section 1609.5 and ASCE 7-05.

KW

Horizontal and vertical sheer diaphragms OR OTHER BRACING IS NOT INDICATED.

c) Flood Loads:
The flood hazard area established for the site is identified as Zone X.

The elevation of the proposed lowest floor is indicated to be 20.06 FEET (NGVD29).

19. Mechanical Systems:
IMC 403.2 Provide Mechanical exhaust from toilets and locker rooms. The recirculation of air from such spaces is prohibited (see Section 403.2.1, Items 1 and 3). THE RETURN AIR PROVIDED IS NOT ALLOWED.

IMC Table 403.3 Provide at least 75cfm outside air per water closet or urinal at toilet rooms.

601.2 Corridors shall not serve as supply, return, exhaust, relief or ventilation air ducts. DOCUMENT THE RETURN OR EXHAUST AIR PROVIDED AT THE CLASSROOMS. (PTAC UNITS PROPOSED AT CLASSROOMS TYPICALLY PROVIDE SUPPLY ONLY, FORCING THE AIR TO BE RETURNED BY THE CORRIDORS.)

20. Plumbing Systems:
409.4 Provide a floor drain in every toilet room. Drains shall be trapped, provided with an approved trap primer, and installed in accordance with this section.

407.2.2 Every building designed for public use shall be provided with facilities in accordance with this chapter, and designated by legible signs for each sex. (Unisex facilities shall not serve as substitute, unless specifically allowed by Note 6 of Table 407). AN INSUFFICIENT NUMBER OF FIXTURES APPEARS TO BE PROVIDED.

a) Provide a minimum 3 Men's toilets, with 2 Men's lavatories, and a minimum 3 Women's toilets with 2 Women's lavatories. and 2 drinking fountains at the Educational occupancy.

b) Provide a minimum 2 Men's toilets, with 1 Men's lavatories, and a minimum 2 Women's toilets with 1 Women's lavatories. and 1 drinking fountains at the Assembly occupancy.

21. Fuel Gas:
No fuel gas use is indicated in the submittal.

22. Electrical Systems:
Additional Electrical Design Documents Required:

a) Provide revised Service Entrance Feeder Diagrams.

b) Provide Electrical Utility Transformer location on the site plan.

c) Provide Transformer Ground Fault calculations, Jim Knoch 867-4638

d) Specify all conductor sizes in accordance with NEC Table 310.16 requirements. (Minimum 12 ga is not sufficient to the various circuit loads indicated.)

NFPA 70:250.24 (A) A premises wiring system supplied by a grounded ac service shall have a grounding electrode conductor connected to the grounded service conductor, at each service, in accordance with 250.24(A)(1) through (A)(5). GROUNDING ELECTRODE IS NOT INCLUDED IN THE SERVICE RISER PROVIDED.

JAME WHITE
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120/208V
9457 SQ.FT.
800 AMP

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867-4638
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NEC TYPE USE
Amps

ALL ON MAIN BRKR.
SUBMETRICAL
12491

A SUBMETRICAL
15613

One set of revised documents shall be returned to this office with:

- A. Completed Plan Review Application.
- B. Appropriate review fee.
- C. A copy of this review letter.

Construction shall not commence until this office determines that satisfactory compliance is achieved.

REVIEWED BY:
JAMES WAITE
ARCHITECT

CC:
Dale Kimball
L A P E L S*
St Tammany Fire Protection District No 1*
City Of Slidell*
New Orleans District* 5042194600