

Dammon Engineering, Inc.

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Nov 8, 2007
October 25, 2007

Mr. Jim Waite
Office of State Fire Marshal
8181 Independence Blvd.
Baton Rouge, LA 70806

RE: P0333770
Aldersgate United Methodist Church
360 Robert Road
Slidell, LA 70458-0000

Dear Mr. Waite,

With regard to the above referenced project, a revised Cover Sheet and M-1 are attached. The following responses are provided to address your comments of 30 Oct 2007:

25. Structural:

The manual used for structural design of this project is IBC SECTION 1609, the method used is NOT IDENTIFIED.

The Cover Sheet has been amended to read as follows:

THIS BLDG. SHALL BE DESIGNED IN ACCORDANCE WITH IBC SECTION 1609 AND ASCE 7-05 USING METHOD #2 AS A FULLY ENCLOSED BLDG USING THE FOLLOWING INFORMATION:

BASIC WIND SPEED (3 SECOND GUSTS)= 130 MPH (FIG 1609)
CATEGORY III BLDG.
IMPORTANCE FACTOR: I =1.15 (TBL 1604.5)
EXPOSURE B, DETERMINATION OF WIND LOADS SHALL BE IN ACCORDANCE WITH IBC SEC 1609.6 (SEC 1609.4)
INTERNAL PRESSURE COEFFICIENT : +.18 & -.18 GC_{pi}
DESIGN WIND PRESSURE FOR EXTERIOR COMPONENTS AND CLADDING: 43.264 PSF
HORIZONTAL AND -32.2 VERTICAL.
GROUND SNOW LOADS= 5 PSF (FIG. 1608.2)

a) Gravity Load Data:

The Cover Sheet has been amended to read as follows:

FLOOR & ROOF LIVE LOADS (SEC 1607.1)

1ST FLOOR - GYMNASIUMS, MAIN FLOORS & BALCONIES - 100 PSF
1ST FLOOR CORRIDORS - 100 PSF
1ST FLOOR CLASSROOMS - 40 PSF
CORRIDORS ABOVE FIRST FLOOR - 80 PSF
2ND FLOOR STORAGE - 125 PSF
ROOF LOADS 300 LBS (CONCENTRATED)
ROOF LOADS 20 PSF (LIVE LOAD)

b) Wind Design Data:

Please see comments above.

Protection of openings for wind-borne debris is required.

The following has been added the Cover Sheet:

ALL GLAZING WILL HAVE APPROPRIATE SIZE WOOD STRUCTURAL PANELS WITH A MINIMUM THICKNESS OF 7/16 INCH AND A MAXIMUM PANEL SPAN OF 8 FEET. PANELS WILL BE PRECUT AND STORED SO THAT THEY SHALL BE EASILY ATTACHED TO THE FRAMING SURROUNDING THE OPENING WITH GLAZED OPENING. PANELS WILL BE ATTACHED WITH ATTACHMENT PROVIDED FROM THE WINDOW COMPANY TO RESIST THE HORIZONTAL AND VERTICAL PRESSURES STATED ON THIS PAGE OR BY OTHER APPROVED METHOD BELOW.

WINDBORNE DEBRIS PROTECTION FASTENING SCHEDULE FOR WOOD STRUCTURAL PANELS			
FASTENER TYPE	FASTENER SPACING		
	PANEL SPAN ≤ 4 FOOT	4 FOOT PANEL SPAN ≤ 6 FOOT	6 FOOT PANEL SPAN ≤ 8 FOOT
2-1/2" #6 WOOD SCREWS	16"	12"	9"
2-1/2" #8 WOOD SCREWS	16"	16"	12"

WINDOWS IN BUILDINGS LOCATED IN WIND BORNE DEBRIS REGIONS SHALL HAVE GLAZED OPENINGS PROTECTED FROM WINDBORNE DEBRIS. WOOD STRUCTURAL PANELS WITH A MIN. THICKNESS OF 7/16" AND A MAX. SPAN OF 8 FEET SHALL BE PERMITTED FOR OPENING PROTECTION IN ONE AND TWO STORY BUILDINGS. PANELS SHALL BE PRECUT TO COVER THE GLAZED OPENINGS WITH ATTACHMENT HARDWARE PROVIDED.

26. Mechanical Systems:

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

TOTAL OUTSIDE AIR VOLUMES OF 90 CFM DOES NOT APPEAR SUFFICIENT AT THE LOCKER ROOMS WHERE MULTIPLE WC/URINALS ARE PROVIDED, PLUS REQUIREMENTS FOR CORRIDORS AND OTHER AREAS SERVED BY THIS SYSTEM. DOCUMENT COMPLIANCE.

The mechanical plan has been revised to show a new AHU #6 for the restrooms. AHU#6 takes 565 cfm of fresh-air for both restrooms.

b) 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). EXHAUST VOLUMES OF 100 CFM DO NOT APPEAR SUFFICIENT AT THE LOCKER ROOMS WHERE MULTIPLE WC/URINALS ARE PROVIDED. DOCUMENT COMPLIANCE.

The Exhaust Volume from the Men's Restroom has been amended to state: EXHAUST 320 CFM
The Exhaust Volume from the Women's Restroom has been amended to state: EXHAUST 245 CFM

c) DOCUMENT THE METHOD AND QUANTITIES OF OUTSIDE AIR TO BE PROVIDED AT CLASSROOMS BY PTAC UNITS. DOCUMENT THAT NO DAMPERING IS PROVIDED ENABLING SHUT OFF OF OUTSIDE AIR INTAKE.

The classrooms utilizing the PTAC units have been supplied fresh air directly through AHU#5.

403.3.4 Ventilation systems shall be balanced by an approved method. Such balancing shall verify that the ventilation system is capable of supplying the airflow rates required by Section 403. PROVIDE AN AIR BALANCE REPORT TO THE AUTHORITY HAVING JURISDICTION.

An air balance shall be performed by an air balance company with a minimum of three years experience in balancing air conditioning systems.

601.2 Corridors shall not serve as supply, return, exhaust, relief or ventilation air ducts. IDENTIFY RETURN AIR QUANTITIES AND LOCATIONS FOR CORRIDORS AND ADJACENT SPACES SUPPLIED BY AHU #3 (LOCKER ROOMS, PANTRY AND BROOM CLOSETS)

The mechanical plan has been revised to show new AHU #6 for the restrooms. AHU#6 takes 565 cfm of fresh-air for both restrooms. The pantry and broom closets are not normally occupied, however 50 cfm of air is being supplied to these rooms from this AHU. The return grill for this AHU is located in the Gymnasium.

504 Exhausts for clothes dryers shall be installed in accordance with this section: DRYER EXHAUSTS ARE NOT INDICATED IN THE SUBMITTED DESIGN.

The mechanical drawing has been amended to show a 4 inch round dryer exhaust vent utilizing metal flex duct. The vent will not utilize a riser.

506.3.8 Grease duct systems shall not have openings therein other than those required for proper operation and maintenance of the system. Any portion of such system having sections not provided with access from the duct entry or discharge shall be provided with cleanout openings. DOCUMENT COMPLIANT ACCESS.

The Type I hood details will be provided by the installer under a separate review.

*506.3.10 Grease duct enclosure. A grease duct serving a Type I hood that penetrates a ceiling, wall or floor shall be enclosed from the point of penetration to the outlet terminal.
i A duct shall penetrate exterior walls only at locations where unprotected openings are permitted by the International Building Code. IDENTIFY THE DUCT TERMINATION. NO LOCATION OR CONDITION IS DETAILED IN THE SUBMITTAL.*

The Type I hood details will be provided by the installer under a separate review.

ii Ducts shall be enclosed in accordance with the International Building Code requirements for shaft construction. The duct enclosure shall be sealed around the duct at the point of penetration and vented to the outside of the building through the use of weather-protected openings. DOCUMENT PROPER ENCLOSURE AT THE PENETRATION OF THE 1 HOUR FLOOR/CEILING ASSEMBLY THROUGH THE SECOND FLOOR TO THE ROOF.

The Type I hood details will be provided by the installer under a separate review.

506.3.11 Where cleanout openings are located in ducts within a fire-resistance-rated enclosure, access openings shall be provided in the enclosure at each cleanout point. Access openings shall be equipped with tight-fitting sliding or hinged doors that are equal in fire-resistive protection to that of the shaft or enclosure. An approved sign shall be placed on access opening panels with wording as follows: ACCESS PANEL. DO NOT OBSTRUCT.

The Type I hood details will be provided by the installer under a separate review.

507.2.2. Type II hoods shall be installed where cooking or dishwashing appliances produce heat, steam, or products of combustion and do not produce grease or smoke, such as steamers, kettles, pasta cookers and dishwashing machines. DOCUMENT COMPLIANT INSTALLATION AT THE COMMERCIAL DISHWASHER INDICATED IN THE KITCHEN.

The commercial dishwasher to be installed is a Champion – UH-100 Undercounter Dishwasher. The code has an exemption for undercounter dishwashers.

If you have any questions, please feel free to call.

Sincerely,

David Dammon
Project Manager