

OCCUPANCY CLASSIFICATION

OCCUPANCY BUSINESS

CONSTRUCTION CLASSIFICATION

CONSTRUCTION TYPE TYPE I/B - FULLY SPRINKLERED

MEANS OF EGRESS

MAXIMUM ALLOWABLE		BUSINESS
*TRAVEL DISTANCE TO EXIT		300 FT
*COMMON PATH OF TRAVEL		100 FT
*DEAD END LENGTH		50 FT

EGRESS CAPACITY TABULATION

OCCUPANCY	AREA	OCC. LOAD	EGRESS WIDTH
STORM SHELTER	REQUIRED 3,315 SF	692 OCCUPANTS	STAIR 692
	PROVIDED 3,500 SF	PER 500	EGRESS WIDTH 340
	5,227 SF	PROVIDED	PROVIDED

STORM SHELTER CALCULATIONS

International Code Council 500-2014: ICC 500 - Standard for the Design and Construction of Storm Shelters

State Building Commission Requirements: Support load is assumed at 100 psf per 300 sq ft of gross typical classroom area plus 10% for faculty and 10% for storage. Minimum issued by the Alabama Building Commission: 10/14/16.

Required Capacity: Total Gross Typical Classroom Area: 17,949 SF / 30 = 598.30 Students. Total Students: 598.30 Plus 10% Faculty: 59.83 Required Total Occupant Load: 659 Occupants

Standing or seated space requirements: 5 SF/person Wheelchair space requirements: 10 SF/person Each storm shelter shall be sized to accommodate a minimum of one wheelchair space for every 200 shelter occupants. 659 / 200 = 3.29 or 4 required wheelchair spaces.

655 Occupants x 5 SF/person = 3,275 SF 4 wheelchair occupants x (10 SF/person) = 40 SF Total SF required = 3,315 SF

Provided Total Occupant Capacity: 696 Occupants (692 standing and 4 wheelchair) Total SF Provided: 3,500 SF 40 SF (4 wheelchair) + 3460 SF (692 standing)

Classrooms/Work Room:

ICC 500 501.1.2.1: Calculation of usable floor area. The usable shelter floor area shall be determined by using the following percentages: 1. Reducing the gross floor area of shelter areas with concentrated furnishings or fixed seating by a minimum of 50 percent. 2. Reducing the gross floor area of shelter areas with unconcentrated furnishings and without fixed seating by a minimum of 35 percent. 3. Reducing the gross floor area of shelter areas with open plan furnishings and without fixed seating by a minimum of 15 percent.

Total Unconcentrated furnishings area (Classroom/Waiting Area): 1,343 SF 35% Reduction: 1,343 SF x .65 = 872.95 SF Total Open Plan Area (Laboratory Area): 1,621 SF 15% Reduction: 2,956 SF x .85 = 1,566.35 SF

Open Area/Comidor: ICC 500 501.1.2.2: Alternative calculation of usable floor area. The usable shelter floor area shall be determined by subtracting from the gross floor area, the floor area partitions and walls, columns, fixed or movable objects, furniture, equipment, or other features that under probable conditions cannot be removed.

Total Comidor Area: 1,125 SF

Total Square Footage (Without Toilets) Required: 3,315 SF Provided: 3,500 SF

Plumbing Fixtures

Toilets Required: 3 (2 mn for first 500 occ + 1 per 500 occs) Provided: 3 Lavatories Required: 1 (1 mn; 1 per 1,000 occupants) Provided: 3

702.4 FIRST AID KIT

A first aid kit shall be supplied in all tornado shelters with a shelter occupant load of greater than 50. GC to supply appropriately sized kit for Tornado Safety room, minimum to meet provided capacity. 696 capacity = 1 - 500person kit and 2 - 100 person kits.

REQUIRED STATEMENT OF RESPONSIBILITY FROM GENERAL CONTRACTORS AND SUBCONTRACTORS

107.3.3 Contractor Responsibility. Each Contractor responsible for the construction of a man wind-force resisting system or any component listed in the quality assurance plan shall submit a written statement of responsibility to the authority having jurisdiction, the responsible design professional, and the owner prior to the commencement of work on the system or component. The contractor's statement of responsibility shall include:

1. Acknowledgement of awareness of the special requirements contained in the quality assurance plan.
2. Acknowledgement that control will be exercised to obtain compliance with the construction documents.
3. Procedures for exercising control within the contractor's organization, the method and frequency of reporting and the distribution of reports.
4. Identification and qualifications of the person(s) exercising such control and their position(s) in the organization.

The contractor's statement of responsibility form issued per the Alabama Building Commission, can be found in the specifications or a copy can be obtained from the Architect.



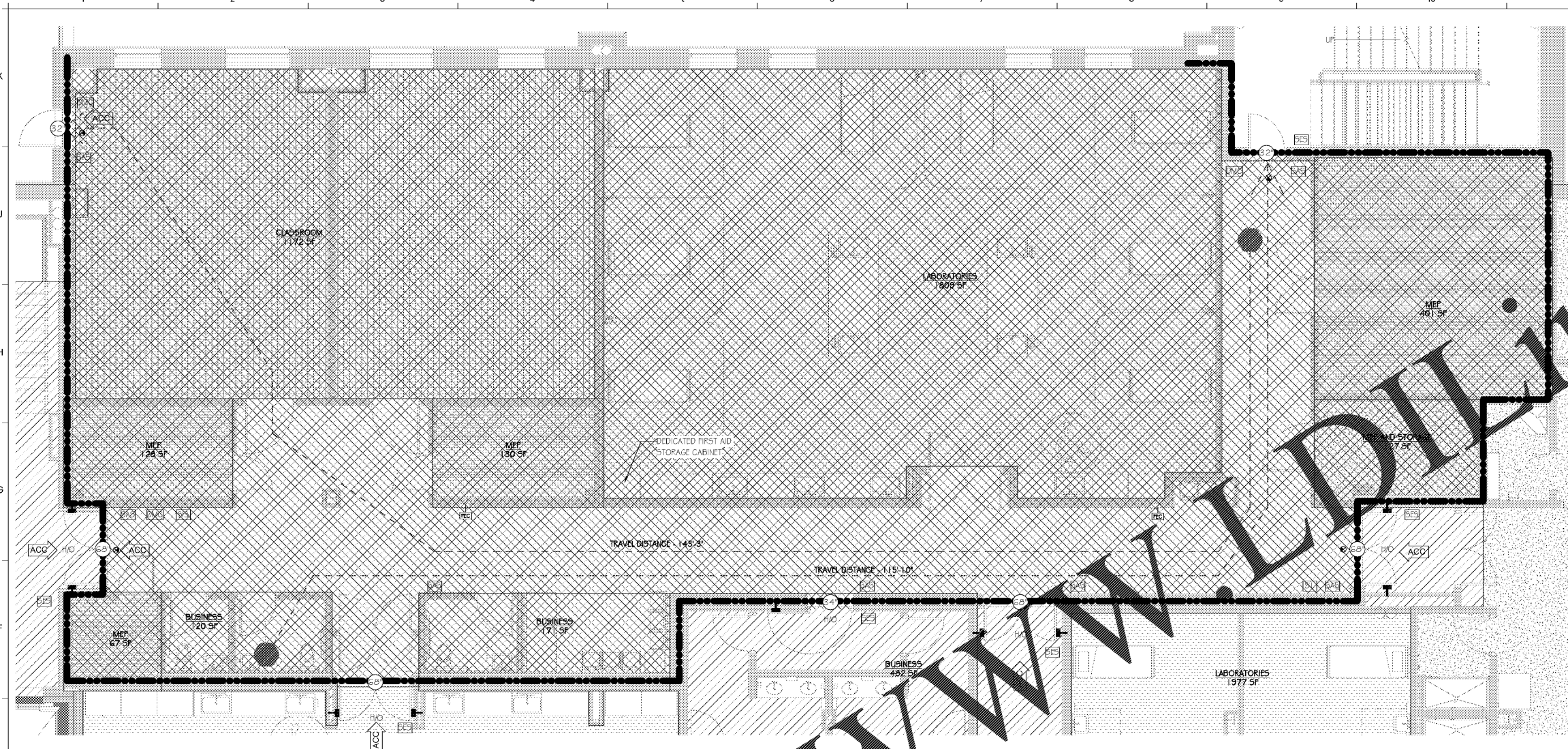
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SIMULATION LABORATORY
BUILDING - USA JOB #16-07
MOBILE, ALABAMA
ABC #2017372
GMC # AMOB160019



LIFE SAFETY PLAN -
STORM SHELTER
G2.03
Sheet 2 of



E1 LIFE SAFETY - STORM SHELTER
SCALE: 1/4" = 1'-0"
TRUE NORTH

LIFE SAFETY PLAN LEGEND

- NON-RATED PARTITION
- 1 HR. RATED PARTITION
- 2 HR. RATED PARTITION / FIRE BARRIER
- 4 HR. RATED PARTITION
- FIRE EXTINGUISHER CABINET
- EMERGENCY EVACUATION MAP SIGNAGE
- DOOR REQUIRING MANUAL CLOSURE SIGNAGE
- STORM SHELTER ACCESS SIGNAGE
- STORM SHELTER ENTRANCE SIGNAGE
- STORM SHELTER DESIGN INFORMATION SIGNAGE
- STAIR IDENTIFICATION SIGN - NOTES ROOF ACCESS IF APPLICABLE
- FIRST AID KIT
- MAGNETIC HOLD-OPEN DEVICE
- EXIT SIGN
- MAXIMUM TRAVEL DISTANCE TO EXIT
- COMMON PATH OF TRAVEL
- CLEAR EXIT WIDTH IN INCHES
- ADA ACCESSIBLE ROUTE
- 1 HOUR RATED HORIZONTAL SHAFTWALL CEILING ASSEMBLY, COMPLY WITH ALL REQUIREMENTS OF UL #1415.
- 2 HOUR RATED ROOFCEILING ASSEMBLY AT STORM SHELTER. SPRAY APPLIED FIREPROOFING TO UNDERSIDE OF STRUCTURAL STEEL DECK AND FRAMING. DECK PROTECTION PER UL# D779 JOIST PROTECTION PER UL# N777.

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