

# 1 General Information

**PROJECT INFORMATION**  
 Name of Project: Oil Change Building (Hurricane)  
 Client: Express Oil Change & Tire Engineers  
 Location: Baton Rouge, Louisiana County: East Baton Rouge Parish State: LA  
 Authority Having Jurisdiction (AHJ): City: Baton Rouge  
 Square Footage / Stories / Height: Main Level G.S.F. = 2,208 Stories = 1 + Pit Height = 27'-3 7/8"  
 Pit Level G.S.F. = 1,340 Total G.S.F. = 3,548

**PROJECT TYPE**  
 New Construction  Addition  Other  
 Alteration  Change of Occupancy

**BUILDING USE**  
 Single Use  Mixed Use (Separated)  Mixed Use (Non-Separated)  
 Description: Automotive repair garage used for general service on automobiles.

**SPRINKLERED**  
 Yes  Partial  No

# 4 Special Detailed Requirements Based On Use and Occupancy (2015 IBC)

**406.6 Repair Garages**  
 Project complies with 406.6.8 through 406.6.6

**413 Combustible Storage**  
 413.1 High-piled storage of combustible materials over 12'-0" or high-hazard commodities over 6'-0"  
 Yes  No  
 413.2 Storage of combustible materials in attics, under-floor, and concealed spaces  
 Yes  No

**414 Hazardous Materials**  
 Project complies with 414.2 Control Areas  
 Number of Control Areas Provided: Entire Building is one control area  
 Location  
 Inside  Outside  
 Use  
 Open  Closed  Storage Only

**Types of Hazardous Materials (Table 307.1.1(1) of IBC and 3206.2 of IFC)**  
 Class III B Liquids Actual Storage per control area: 4040.13 gallons  
 Class IA Flammable Liquids Actual Storage per control area: .94 gallons  
 Class IB Flammable Liquids Actual Storage per control area: 3.25 gallons  
 High-Hazard Commodities per IFC 2015 3203.6 / 3206.2 (Rubber Tires)  
 Allowable Quantity: 0-500 s.f. Actual Quantity: X<500 s.f.

# 7 Fire And Smoke Protection Systems (2015 IBC)

**718.4 Draftstopping in Attics**  
 Yes  No  Not Required  
 Openings in the partitions shall be protected by self-closing doors with automatic latches constructed as required for the partitions.  
 Installed in attics and concealed roof spaces such that any horizontal area does not exceed 3,000 s.f.

# 10 Means of Egress (2015 IBC)

Table 1004.1.2 Maximum Floor Area Allowance Per Occupant

Occupancy Classification	Specific Use	Square Footage	SF Per Occupant	# of Occupants
S-1	Oil Change	1271	200 gross	6.36
S-1	Corridor	131	200 gross	0.66
S-1	Pit	1218	200 gross	6.09
Subtotal		2620		13.11
B	Service Writing	140	100 gross	1.40
B	Waiting Room	267	100 gross	2.67
B	Toilet 3	50	100 gross	0.50
B	Manager	46	100 gross	0.46
B	Toilet 8	49	100 gross	0.49
B	Break	54	100 gross	0.54
Subtotal		606		6.06
<b>Grand Total</b>		<b>3226</b>		<b>19.17</b>

# 2 Codes

**APPLICABLE CODES**

- 2015 International Building Code with Louisiana Amendments
- ASHRAE Standard 90.1-2007
- 2015 International Fire Code
- 2015 International Fuel Gas Code
- 2015 International Mechanical Code
- 2015 International Plumbing Code
- 2010 ADA Standards for Accessible Design
- 2014 National Electrical Code

# 5 General Building Heights and Areas (2015 IBC)

**504 Building Height and Areas (Per Table 504.3 and 504.4)**  
 Allowable Building Height = 40'-0" Actual Building Height = 27'-3 3/8"  
 Allowable Number of Stories Above Grade Plane = 1 Actual Number of Stories Above Grade Plane = 1  
 Allowable Area Factor = 9,000 s.f. Actual Area = 3,548 g.s.f.

**505.3 Equipment Platforms**  
 Project complies with 505.3 through 505.3.3  Not Applicable

**508 Mixed Use and Occupancy**  
 Mixed Use Occupancy (Separated)  Mixed Use Occupancy (Non-Separated)  Does not apply

# 8 Interior Finishes (2015 IBC)

Table 803.11 Interior Wall and Ceiling Finish Requirements by Occupancy

Group	Exit Enclosures and Exit Passageways	Corridors	Rooms and Enclosed Spaces
S-1	A	B	C
B	A	B	C

804.4.2 Maximum Critical Radiant Flux  
 Class I  Class II

# 3 Use and Occupancy Classification(s)

Assembly Group A-1  High-Hazard Group H-2  Residential Group R-2  
 Assembly Group A-2  High-Hazard Group H-3  Residential Group R-3  
 Assembly Group A-3  High-Hazard Group H-4  Residential Group R-4  
 Assembly Group A-4  High-Hazard Group H-5  Storage Group S-1  
 Assembly Group A-5  Institutional Group I-1  Storage Group S-2  
 Business Group B  Institutional Group I-2  Utility and Warehouse Group U  
 Educational Group E  Institutional Group I-3  
 Factory Group F-1  Institutional Group I-4  
 Factory Group F-2  Mercantile Group M  
 High-Hazard Group H-1  Residential Group R-1

# 6 Types of Construction (2015 IBC)

601 General Building Construction Classification  
 Type IA  Type IB  Type IIA  Type IIB  Type IIIA  
 Type IIIB  Type IV  Type VA  Type VB

Table 601 Fire Resistance Rating Requirements for Building Elements

Building Elements	Hours Required	Hours Provided
Primary Structural Frame	0	0
Bearing Walls (Exterior)	0	0
Bearing Walls (Interior)	0	N/A
Nonbearing Walls & Partitions (Exterior)	0	0
Nonbearing Walls & Partitions (Interior)	0	0
Floor Construction & Associated Secondary Members	0	0
Roof Construction & Associated Secondary Members	0	0

Table 602 Fire Resistance Requirements for Exterior Walls Based on Fire Separation Distance

Fire Separation Distance	Rear	Right	Front	Left
X < 5				
5 ≤ X < 10				
10 ≤ X < 30				
X ≥ 30	>30'	>30'	>30'	>30'

# 9 Fire Protection Systems (2015 IBC)

**903 Automatic Sprinkler Systems**  
 Yes  Partial  Not Required

**906 Portable Fire Extinguishers**  
 Yes  No  
 Project complies with 906.1 through 906.10  
 Project complies NFPA 10

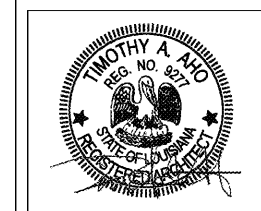
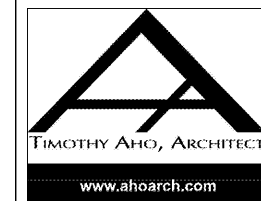
**907 Fire Alarm and Detection System**  
 Yes  Not Required

Table 1005 Egress Width

Occupancy	Specific Use	Occupant Load	Stairways	Other Egress Components	Required Capacity in Inches	Egress Width Provided
S-1	Oil Change	6.36	N/A	0.2	1.27"	
S-1	Corridor	0.66	N/A	0.2	0.13	
S-1	Pit	6.09	N/A	0.3	1.83"	
TOTAL					3.23"	64" (2 doors @ 32" each)
B	Service Writing	1.40	N/A	0.2	.28"	
B	Waiting Room	2.67	N/A	0.2	.53"	
B	Toilet 3	.50	N/A	0.2	.10"	
B	Manager	.46	N/A	0.2	.09"	
B	Toilet 8	.49	N/A	0.2	.10"	
B	Break	.54	N/A	0.2	.11"	
TOTAL					1.21"	32"

Table 1006.2.1 Spaces with One Exit Or Exit Access Doorway

Occupancy	Max Occupant Load	Number of Exits Required	Max Occupant Load Provided	Number of Exits Provided
S-1	29	1	13.11	2
B	49	1	6.06	1



Express Oil Change & Tire Engineers  
 Right Hand Oil Change Building (Hurricane)  
 2265 O'Neal Lane  
 Baton Rouge, LA 70816

FINAL

No.	Description	Date

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**Life Safety / Code Summary**

Project number	20025
Date	08/27/2020
Drawn by	ARC
Checked by	TAA
<b>OC-LS100</b>	
Scale	12" = 1'-0"