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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

RENOVATION

ROBERT SOLLBERGER
DAMMON ENGINEERING, INC
1095 FLORIDA AVE
SLIDELL, LA 70458-0000

RE: P0333142
TEXTRON MARINE- FRONT STREET
2585 FRONT ST
SLIDELL, LA 70458-0000

NFPA 101, 2003

STORAGE

Dear Applicant:

DEADLINE IMPOSED

This is to advise that we have reviewed the drawings and specifications for the subject proposed construction and have determined that they appear to satisfactorily comply with the adopted laws, codes, rules and regulations of The State Fire Marshal subject to the following requirements:

1. RS 40:1574 "DEADLINE IMPOSED" - The Professional of Record, if applicable, otherwise the owner, shall furnish documentation addressing item(s) number 5, 6, 7, 8, 9, 10, and 25 of this letter to this office within 21 days of the date on this letter, or this review may be rescinded and found "Not In Compliance". Construction shall NOT be authorized for all areas which may be affected by the item(s) listed in this paragraph. The state inspector shall verify that written documentation has been received and acknowledged by the Plan Review Section of this office prior to allowing occupancy.
2. This work entails the renovation an existing 53,235 warehouse building, to add a 2 story office area within the existing building envelope.

The new area entails approximately 4% of the warehouse area and is considered accessory to that Storage occupancy.
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. LRS 40:1731 (Effective 8/15/95) Provide handicapped accessibility in accordance with ADA-AG (Accessibility Guidelines - September 1994). This does not include a review for compliance with the Federal Americans with Disabilities (Civil Rights) Act of 1990. Compliance with state regulations and requirements does not guarantee compliance with federal law.

"PARTICULAR APPARENT DEFICIENCIES" and paragraph references are noted as follows:

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- a) 4.3.8 Changes in levels along an accessible route shall comply with 4.5.2. If an accessible route has changes in level greater than 1/2 in, then a ramp, elevator, or platform lift (as permitted in 4.1.3 and 4.1.6) shall be provided that complies with 4.7, 4.8, 4.10, or 4.11, respectively. An accessible route does not include stairs, steps, or escalators. See definition of "egress, means of" in 3.5. **PROPOSED EXCLUSIVE ACCESS TO OFFICE AREAS BY STAIR IS NOT ALLOWED. PROVIDE REVISED PLAN INCLUDING ACCESSIBLE ROUTE INTO THIS AREA.**
- b) 4.1.3(9) and 4.3.10 Each required exit at levels above or below the Level of Exit Discharge (L.E.D.) shall be an accessible area of rescue assistance complying with 4.3.11. (SEE REQUIRED DETAILS IN NFPA SECTION OF THIS REVIEW.
5. Table 42.2.5.1 Common path of travel in an unsprinklered building shall not exceed 50 feet. **THE COMMON PATH OF TRAVEL TO THE PROPOSED EXIT ENCLOSURE ON THE SECOND FLOOR DOES NOT COMPLY. PROVIDE REVISED COMPLIANT SECOND FLOOR PLAN.**
6. ADA-AG 4.1.3(9) and 4.3.10 Each required exit shall be an accessible means of egress or an accessible area of rescue assistance (4.3.11). **PROVIDE REVISED PLAN DOCUMENTING COMPLIANCE**
- a) An area of refuge shall have direct access to an elevator or stair.
- b) Elevator or stair access shall not require leaving an area of refuge.
- c) A stair from an area of refuge shall be a minimum of 48" clear between handrails.
- d) Provide two-way communication between an area of refuge and a central control point. The two-way communication system shall;
1. include posted instructions explaining how to use the system,
 2. include written identification of the location of the area of refuge,
 3. be in accordance with A-7.2.12.2.6 and ADA-AG 4.3.11.4,
 4. be in accordance with ADA-AG 4.3.11.5 for telephones.
- e) Wheelchairs shall be accommodated at 1 for each 200 occupants.
- f) Tenable conditions shall be maintained, within any area of refuge that does not exceed 1000 sq. ft., for 15 minutes.
- g) Provide 1-hr separation with 20 minute self-closing or automatic-closing doors for the area of refuge.
- h) A smoke damper shall be provided for each duct which penetrates a rated wall in an area of refuge.
- i) Provide an identification sign at each area of refuge.
- j) Door to an area of refuge shall be identified with required tactile signage.
- k) An exit which is not handicap accessible shall be so identified with signage. Include directional signage to the nearest area of refuge.
- l) All required signage shall be illuminated in accordance with 7.10.
- m) Required signage shall be in accordance with ADA-AG 4.3.11.5.

7. 101:7.1.3.2.(6) Penetrations of the exit enclosure assembly is limited to the specific conditions listed in this section.
- a) PLUMBING LINES ROUTED FROM AHU THROUGH THE STAIR ENCLOSURE WALL ARE NOT ALLOWED. (SEE SHEET P-1)
 - b) OUTSIDE AIR DUCT CROSSING THE STAIR ENCLOSURE AND PENETRATING THE ENCLOSURE ASSEMBLY ARE NOT ALLOWED. (SEE SHEET M-1)
 - c) ELECTRICAL SWITCHES, LIGHTING AND POWER DEVICES LOCATED ON THE EXIT STAIR ENCLOSURE WALL SERVING OTHER SPACES ARE NOT ALLOWED. (SEE SHEET E-1)
8. 101:8.2.2.3 Fire compartments shall be formed by fire barriers that are continuous from foundation through all intervening construction to the roof deck, from outside wall to outside wall or from fire barrier to fire barrier, including continuity through all concealed spaces, such as those found above a ceiling, including interstitial spaces.
- a) PROVIDE A FIRE RESISTANCE RATED FLOOR CEILING ASSEMBLY AT THE FIRST FLOOR CEILING OF THE EXIT ENCLOSURE SEPARATING THE CLOSET AREA ABOVE FROM THE EXIT ENCLOSURE.
 - b) IDENTIFY the listed assemblies that are properly tested by Underwriters Laboratories (UL), Factory Mutual (FM), or other approved testing laboratory, in writing to this reviewer PRIOR TO CONSTRUCTION (include the project (P0#) number assigned to this review that is referenced at the beginning of this letter). Please be advised that a failure to provide this information in a timely manner may cause substantial delays at final inspection and may adversely impact subsequent occupancy.
- (NOTE: THE LISTED ASSEMBLY INDICATED ON THE SUBMITTAL DOCUMENTS FOR THE STAIR ENCLOSURE WALLS IS CHANGED TO WP 1072, THROUGH SUBSEQUENT CORRESPONDANCE WITH THE PROFESSIONAL OF RECORD, IN ASSOCIATION WITH THE CHANGE OF CONSTRUCTION TYPE NOTED ELSEWHERE IN THIS LETTER.)
9. 101:7.1.7.2.2 Steps in a change in elevation, where the elevation difference is 21" or less, shall have minimum 13" treads that are readily apparent. NEW STEPS TO FIRST FLOOR OFFICE AREA AND FROM STORAGE ROOMS TO EXTERIOR DOOR SHALL COMPLY. (NO DIMENSION IS GIVEN)
10. 101:7.2.2.2.1 / 101:7.5.4.4 Stairs shall comply with the appropriate Stair table and ADA-AG. NEW STEPS TO FIRST FLOOR OFFICE AREA AND FROM STORAGE ROOMS TO EXTERIOR DOOR SHALL COMPLY. (NO DIMENSIONS ARE GIVEN)
- a) 44 inch minimum width (48" minimum clear width between handrails at stairs used within an accessible means of egress - See 101:7.2.12.2.3).
 - b) 7" maximum and 4" minimum rise. BUILDING SECTION INDICATES ONLY A +/-6" ELEVATION CHANGE FROM EXISTING FLOOR TO NEW OFFICE FIRST FLOOR LEVEL, BUT THE STEPS SHOWN INDICATE 2 RISERS, PLEASE CLARIFY AND COMPLY WITH THESE MINIMUM DIMENSIONS FOR RISER.
 - c) 6'-8" minimum headroom.
 - d) Landings (See 7.2.1.3, 7.2.1.4.4 and 7.2.2.3.2).

e) Stair treads shall be uniformly slip resistant.

11. 101:7.2.2.4.4.10 Where a stair handrail is not continuous between landings, it shall continue to slope for a depth of one tread beyond the bottom riser and shall extend 12" level with the landing at the top riser. In addition, if a handrail is to provide for handicapped accessibility, an additional 12" extension is required at the bottom level with the landing in accordance with ADAAG 4.9.4(2). ALL HANDRAILS SHALL COMPLY, THE EXTENSIONS SHOWN ARE NOT SUFFICIENT.
12. LAC 55:V:303.D Provide listed portable fire extinguishers in accordance with NFPA 10. (Refer to Appendix E for distribution information.) IDENTIFY SIZE AND TYPE AND LOCATE THE DEVICES IN PLANS.

NOTE: THE FOLLOWING COMMENTS IDENTIFY ISSUES FOR INFORMATIONAL AND CAUTIONARY PURPOSES OR ISSUES THAT COULD NOT BE VERIFIED IN THE SUBMITTED DOCUMENTS.

13. This exception is intended to apply to buildings used as general warehouses, special purpose industrial structures such as unoccupied equipment buildings, general purpose industrial buildings, etc.

After consultation with the Office of Rehabilitation Services, it has been determined that this office will not require this facility to comply with any of the ADA-AG or LSC requirements for individuals with disabilities, with the following stipulations:

1. No attached office spaces are allowed with this exception.
 2. No floor plan modifications are permitted. Office additions and spaces created which constitute a change in use will require the upgrading of all existing non-complying features to conform with the provisions for new construction.
 3. Visual alarm notification shall be provided if a fire alarm system is required by Code.
 4. If a complaint is received about discrimination in hiring of handicapped individuals or concerning handicapped accessibility to any part of the facility, then this office shall reserve the right to investigate the complaint and, if justified, shall reserve the right to require the facility or a portion thereof to be upgraded to comply with the accessibility requirements enforced by this office.
 5. Please note that this document indicates specific compliance with state regulations and does not guarantee nor attempt to circumvent compliance with federal law.
14. LRS 40:1731-(Effective 8/15/95) Provide handicapped accessibility in accordance with ADA-AG (Accessibility Guidelines - September 1994). This does not include a review for compliance with the Federal Americans with Disabilities (Civil Rights) Act of 1990. Compliance with state regulations and requirements does not guarantee compliance with federal law.

"CAUTIONARY/INFORMATIONAL" items and paragraph references are noted as follows:

- a) 4.5.2 Thresholds shall comply with requirements of this section regarding changes in level. (Not more than 1/2" height and beveled if over 1/4").

- b) 4.13.9 Door hardware shall comply with this section. Hardware shall not require tight grasping, tight pinching, or twisting of the wrist to operate.
- c) 4.1.3(16)(a) Provide low level mounted exit signage in accordance with 4.30.1, 4.30.4, 4.30.5 and 4.30.6 (raised character, letter size, mounting) at all required exit doors to the exterior, exit stair doors and horizontal exit doors.
- d) 4.1.3(16) Permanent signage shall comply with 4.30.
 - 1. Signage, where provided for permanent rooms and spaces shall provide;
 - a. braille and raised lettering as per 4.30.4,
 - b. letter/symbol to background color contrast as per 4.30.5, and
 - c. a 60" height from floor to the centerline of the sign as per 4.30.6.
 - 2. Other permanent signs which provide direction to or information about functional spaces of the building shall provide;
 - a. letter character width to height proportion as per 4.30.2,
 - b. character height proportion based on height of sign from finish floor as per 4.30.3, and
 - c. letter/symbol to background color contrast as per 4.30.5.
- 15. 101:7.2.1.5.9 Doors shall be openable with ONLY one releasing operation. A two-step release, such as a knob and an independent slide bolt, is NOT acceptable.
- 16. 101:7.2.1.5 Locks on doors in means of egress shall not require the use of a key, special device or special knowledge to open in the direction of egress.
- 17. 101:8.3.5 Penetrations through rated construction shall be sealed by approved firestop systems or devices tested in accordance with ASTM E-814 or ANSI/UL 1479 or by assemblies of firestopping materials capable of preventing the passage of flames and hot gases when tested and rated in accordance with NFPA 251. (This requirement applies for elevator controls on shaft walls, electrical outlets, light switches, etc.).
 - a) Notify the District Office identified at the end of this letter for inspection of all completed fire and/or smoke barrier walls before any construction is installed that would conceal such construction and prevent a proper inspection. Access to randomly selected areas may be required by the inspector at time of final inspection if this notification is not given.
 - b) Provide detailed instructive cut sheets of the fire penetration sealing system used to the inspector at time of inspection. Random selective sampling by the contractor will be observed by the inspector.
- 18. LRS 40:1653 and 40:1628 All work and inspections of fire alarm, fire suppression, automatic sprinkler and fire extinguishing systems or portable fire extinguishers shall be performed by a State of Louisiana certified agent.
- 19. Shop drawings for fire protection systems, such as Fire Alarm, Sprinklers, and Suppression Systems, that are required to be submitted to this office for review, shall be routed through the "Professional of Record's" (Architect / Engineer) office, and shall be stamped with his "Shop Drawing Review Stamp" or equivalent, indicating that shop drawings have been reviewed by him for conformance with plans, specifications, and appropriate codes.
- 20. LAC 55:V:307 Periodic observation of construction shall be made by a licensed architect or civil engineer. The enclosed Certificate of Completion containing the signature(s) of the responsible design professional(s) shall be presented to the Inspector at time of final inspection for occupancy.

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;
2006 International Existing Building Code (IEBC) not including Chapter 1;
2006 International Mechanical Code (IMC);
2000 Louisiana State Plumbing Code (LSPC);
2006 International Fuel Gas Code (IFGC);
2005 National Electric Code (NEC)

21. Building Planning:

a) Proposed Occupancy/Use Group Classification:

The occupancy is STORAGE Group S-2 per IBC Section(s) 311.3.

b) Special Occupancy Areas:

There are NO special detailed requirements for STORAGE per IBC Chapter 4. This review does not include High Hazard storage.

c) Incidental/Accessory Use Areas:

There is no incidental use area. The work proposed creates an accessory Business occupancy per IBC Section 508, within the existing Storage occupancy area.

d) Construction Type/Building Limitations:

The construction type is indicated to be Type II (B) per IBC Section 602. (The Type V(B) construction indicated in the submittal documents has been changed per subsequent correspondence with the Professional of Record. The proposed work is consistent with the construction type of the existing building.)

Any wood used on the project shall comply with Section 603 - Combustible Materials in Type I and II Construction.

The proposed construction does not affect the allowable height and area limitations of Table 503, for the existing building.

e) Classification of Work:

The scope of work is classified as Alteration-Level 2 per IEBC Section 404.

404.2 Level 2 alterations shall comply with the provisions of Chapter 6 for Level 1 alterations as well as the provisions of Chapter 7.

22. Fire-Resistance-Rated Construction and Interior Finishes:

a) Fire-Resistance-Rated Construction:

No deficiencies noted.

b) Interior Finishes:

Interior walls and ceiling finishes shall be Class B: Flame spread 0-75; smoke-developed 0-450, at exit enclosures.

Interior walls and ceiling finishes shall be Class C: Flame spread 0-200; smoke-developed 0-450, at other enclosed rooms and spaces.

23. Fire Protection Systems:
Chapter 9 requires no fire sprinkler or fire alarm /detection systems for this occupancy, and none are indicated to be provided.
24. Means of Egress:
a) Refer to Life Safety Code review above for means of egress requirements.
25. Structural:
The proposed work does not affect the existing structure, which includes primary wind force resisting systems, and the building components and cladding. Structural work of the project is limited to the gravity loads for second floor office areas.
- a) The manual and method used for structural design of this project is NOT INDICATED
- b) Gravity Load Data:
Minimum live loads shall be in accordance with IBC Table 1607.1 or ASCE 7-05 Table 4-1
Minimum Snow loads shall be in accordance with IBC Fig. 1608.2 or ASCE 7-05 Fig. 7.1.
- First Floor live loads are NOT INDICATED.
Floor live loads above the first floor are NOT INDICATED.
Corridor live loads are NOT INDICATED.
Ground Snow loads are NOT A FACTOR IN THIS CONSTRUCTION.
Roof loads are NOT A FACTOR IN THIS CONSTRUCTION.
26. Mechanical Systems:
No deficiencies noted. (See NFPA comments regarding routing in exit enclosures.)
27. Plumbing Systems:
No deficiencies noted. (See NFPA comments regarding routing in exit enclosure walls.)
28. Fuel Gas:
No fuel gas is indicated in association with this work.
29. Electrical Systems:
No deficiencies noted. (See NFPA comments regarding installations in exit enclosure walls.)
30. NOTE: Please enclose a copy of this letter with future submittals or other correspondence pertaining to this project.

Changes to construction in the field which are not consistent with the reviewed documents are not authorized unless reviewed by this office for compliance with Code. Modifications to reviewed plans must be submitted to this office by the Architect/Civil Engineer for review prior to final inspection. If an Architect or Civil Engineer is not required by RS 37:155, revisions shall be submitted by the Owner. Submittals shall include plans, completed application, a minimum \$55.00 review fee, and a copy of the most current plan review letter.

Compliance with code requirements for fire protection systems, such as Fire Alarm, Sprinkler and Suppression Systems, is determined by separate shop drawing submittal and is not included in this review.

This review applies to work indicated in the drawings or specifications. Existing portions of the facility of building unaffected by the new work shall comply with LAC 55:103B thru 55:103F.

This review shall in no way permit and/or authorize any omissions or deviations from the specific requirements of the adopted codes, rules and regulations in accordance with R.S. 40:1574.1(B).

This review is valid for 180 days from the date of this letter. Construction permits must be issued and/or construction must commence within this time period.

This office requires certification of the completed project in accordance with the approved documents (certificate enclosed).

Occupancy of the project will not be permitted until we receive the completed certificate and a satisfactory inspection of the completed construction has been made by this office.

To arrange for inspection of the project, please contact the District Office at the phone number below two (2) to three (3) weeks in advance. The plans stamped reviewed by this office must be available on job site at time of inspection. Certificate of completion must be provided to the inspecting Deputy for final inspection.

REVIEWED BY:
JAMES WAITE
ARCHITECT

CC:
Textron Marine & Land Systems
St Tammany Fire Protection District No 1*
City Of Slidell*
New Orleans District* 5042194600



STATE OF LOUISIANA
DEPARTMENT OF PUBLIC SAFETY AND CORRECTIONS

OFFICE OF STATE FIRE MARSHAL

CERTIFICATE OF COMPLETION

DATE	STATE FIRE MARSHAL PROJECT P0 _____	SYSTEM TYPE _____
	STATE FIRE MARSHAL PROJECT P0 _____	SYSTEM TYPE _____
	STATE FIRE MARSHAL PROJECT P0 _____	SYSTEM TYPE _____
	STATE FIRE MARSHAL PROJECT P0 _____	SYSTEM TYPE _____

Please list all projects pertaining to this building, scheduled for review at this time. System type refers to Architectural, Fire Alarm, Kitchen Hood/Wet Chemical Suppression, Fire Suppression, or Storage Tank.

To arrange for inspection of the project, please contact the district office two (2) to three (3) weeks in advance. To verify inspection district and phone number please refer to the cc list on the last page of the State Fire Marshal review letter. The plans stamped reviewed by this office must be available on job site at time of inspection. This Certificate Of Completion must be provided to the inspecting deputy at final inspection.

This is to certify that,

PROJECT TITLE FROM APPLICATION		
PROJECT ADDRESS		
CITY	STATE	ZIP CODE

was periodically observed by me, by my consultants, and/or by others in my employ during construction and, to the best of my knowledge, information and belief, has been completed in accordance with the safety provisions which were shown in the plans and specifications previously reviewed by the Fire Marshal.

UNDER PENALTY OF LAW FOR FALSE STATEMENTS, I,

NAME OF ARCHITECT OR ENGINEER IF
REQUIRED, OTHERWISE OWNER

PRINTED NAME

SIGNATURE

ARCHITECT/CIVIL ENGINEER LICENSE
NUMBER

CERTIFY ALL STATEMENTS CONTAINED HEREIN ARE, TO THE BEST OF MY
KNOWLEDGE, INFORMATION AND BELIEF, TRUE AND CORRECT

LAC 55:V:307 OBSERVATION OF CONSTRUCTION

A. For a structure which by law may only be constructed with plans prepared and certified by a licensed architect or civil engineer, it shall be the duty of the owner of such a structure to provide for periodic observation of the construction of the structure to determine if the work is proceeding in accordance with the plans and specifications as approved by the fire marshal. The observations shall be performed by a registered architect or a registered civil engineer.

B. Upon completion of such work, where the law requires the owner to engage an architect or registered civil engineer, the owner shall furnish to the fire marshal a certificate signed by a registered architect or registered civil engineer stating that the periodic observations have been made and that to the best of the architect's or engineer's knowledge, information and belief, the work was completed in accordance with those fire safety standards and regulations stipulated in the plans and specifications previously approved by the fire marshal. When the owner has not engaged an architect or registered civil engineer, and the same is not required by law, the owner must submit the certificate of completion when appropriate, but always under his signature.

C. Occupancy of a structure, watercraft or movable prior to furnishing a certificate to the fire marshal as required under this regulation is expressly forbidden by the fire marshal, unless and until a satisfactory inspection has been made by the fire marshal or his certified representative.

D. In order to comply with the requirements of §307.B, the owner must submit to the fire marshal the following certificate completed by the architect, civil engineer, or, if neither is required by law, the owner.



COMcheck Software Version 3.4.1
Envelope Compliance Certificate

2007-08-14
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90.1 (2004) Standard

Report Date: 08/14/07

Data filename: J:\COMME-1\TEXTRO-4\comcheck.cck

Section 1: Project Information

Project Title: Textron Marine & Land

Construction Site:
2585 Front Street
Slidell, LA 70458

Owner/Agent:
Teresa Bergeron
Textron Marine & Land
2585 Front Street
Slidell, LA 70458
504-254-6734

Designer/Contractor:
Pete Dammon
Dammon Engineering
1095 Florida Ave
Slidell, LA 70458
985-649-5832

Section 2: General Information

Building Location (for weather data): **Slidell, Louisiana**
Heating Degree Days (base 65 degrees F): **1674**
Cooling Degree Days (base 50 degrees F): **6660**
Building Type for Envelope Requirements: **Non-Residential**
Project Type: **Addition**
Vertical Glazing / Wall Area Pct.: **6%**

Activity Type(s) **Floor Area**
Common Space Types: Office - Enclosed 2232

Section 3: Requirements Checklist

Envelope PASSES: Design 3% better than code.

Climate-Specific Requirements:

Component Name/Description	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor
Roof 1: Attic Roof with Wood Joists	1110	30.0	45.0	0.013	0.034
Exterior Wall 1: Wood-Framed, 24" o .c.	1110	19.0	30.0	0.021	0.089
Door 1: Other, Swinging	72	---	---	2.000	0.700
Window 1: Metal Frame with Thermal Break, Double Pane, Tinted, Fixed, SHGC 0.30, PF 0.20	72	---	---	1.000	1.220
Floor 1: Wood-Framed	1110	19.0	20.0	0.025	0.051

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.

Insulation:

- 1. Open-blown or poured loose-fill insulation has not been used in attic roof spaces with ceiling slope greater than 3 in 12.
- 2. Wherever vents occur, they are baffled to deflect incoming air above the insulation.
- 3. Recessed lights, equipment and ducts are not affecting insulation thickness.
- 4. No roof insulation is installed on a suspended ceiling with removable ceiling panels.
- 5. All exterior insulation is covered with protective material.
- 6. Cargo and loading dock doors are equipped with weather seals.

Fenestration and Doors:

- 7. Windows and skylights are labeled and certified by the manufacturer for U-factor and SHGC.

- 8. Fixed windows and skylights unlabeled by the manufacturer have been site labeled using the default U-factor and SHGC.
- 9. Other unlabeled vertical fenestration, operable and fixed, that are unlabeled by the manufacturer have been site labeled using the default U-factor and SHGC. No credit has been given for metal frames with thermal breaks, low-emissivity coatings, gas fillings, or insulating spacers.


Air Leakage and Component Certification:

- 10. All joints and penetrations are caulked, gasketed, weather-stripped, or otherwise sealed.
- 11. Windows, doors, and skylights certified as meeting leakage requirements.
- 12. Component R-values & U-factors labeled as certified.
- 13. Insulation installed according to manufacturer's instructions, in substantial contact with the surface being insulated, and in a manner that achieves the rated R-value without compressing the insulation.

Section 4: Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed envelope system has been designed to meet the 90.1 (2004) Standard requirements in COMcheck Version 3.4.1 and to comply with the mandatory requirements in the Requirements Checklist.

EMETT DAMMOW
Name - Title


Signature

8-14-07
Date



Lighting and Power Compliance Certificate

90.1 (2004) Standard

Report Date: 08/14/07

Data filename: J:\-COMME-1\TEXTRO-4\comcheck.cck

Section 1: Project Information

Project Title: Textron Marine & Land

Construction Site:
2585 Front Street
Slidell, LA 70458

Owner/Agent:
Teresa Bergeron
Textron Marine & Land
2585 Front Street
Slidell, LA 70458
504-254-6734

Designer/Contractor:
Pete Dammon
Dammon Engineering
1095 Florida Ave
Slidell, LA 70458
985-649-5832

Section 2: General Information

Building Use Description by: **Activity Type**
Project Type: **Addition**

<u>Activity Type(s)</u>	<u>Floor Area</u>
Common Space Types: Office - Enclosed	2232

Section 3: Requirements Checklist

Interior Lighting:

1. Total actual watts must be less than or equal to total allowed watts.

Allowed Watts	Actual Watts	Complies
2455	845	YES

2. Exit signs 5 Watts or less per side.

Exterior Lighting:

3. Comply with Sections 9.4.4 and 9.4.5 of 90.1-2004 and attach documentation.

Controls, Switching, and Wiring:

4. Independent manual or occupancy sensing controls for each space (remote switch with indicator allowed for safety or security).
5. Occupant sensing control in class rooms, conference/meeting rooms, and employee lunch and break rooms.

Exceptions:

Spaces with multi-scene control; shop classrooms, laboratory classrooms, and preschool through 12th grade classrooms.

6. Automatic shutoff control for lighting in >5000 sq.ft buildings by time-of-day device, occupant sensor, or other automatic control.
- Exceptions:*

24 hour operation lighting; patient care areas; where auto shutoff would endanger safety or security.

7. Master switch at entry to hotel/motel guest room.
8. Separate control device for display/accent lighting, case lighting, task lighting, nonvisual lighting, lighting for sale, and demonstration lighting.
9. Photocell/astromical time switch on exterior lights.
- Exceptions:*

Covered vehicle entrance/exit areas requiring lighting for safety, security and eye adaptation.

10. Tandem wired one-lamp and three-lamp ballasted luminaires (No single-lamp ballasts).
- Exceptions:*

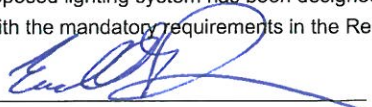
- Electronic high-frequency ballasts;
- Luminaires not on same switch;
- Recessed luminaires 10 ft. apart or surface/pendant not continuous;
- Luminaires on emergency circuits.

Voltage Drop:

- 11. Feeder conductors have been designed for a maximum voltage drop of 2 percent.
- 12. Branch circuit conductors have been designed for a maximum voltage drop of 3 percent.

Section 4: Compliance Statement

Compliance Statement: The proposed lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 90.1 (2004) Standard requirements in COMcheck Version 3.4.1 and to comply with the mandatory requirements in the Requirements Checklist.

EMMETT D. HANNAW  8-14-05
Name - Title Signature Date

Section 5: Post Construction Compliance Statement



COMcheck Software Version 3.4.1 Lighting Application Worksheet

90.1 (2004) Standard

Report Date:

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Section 1: Allowed Lighting Power Calculation

A Area Category	B Floor Area (ft ²)	C Allowed Watts / ft ²	D Allowed Watts (B x C)
Common Space Types:Office - Enclosed	2232	1.1	2455
Total Allowed Watts =			2455

Section 2: Actual Lighting Power Calculation

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Common Space Types:Office - Enclosed (2232 sq.ft.)				
Linear Fluorescent 1: 48" T12 40W / Magnetic	4	13	65	845
Total Actual Watts =				845

Section 3: Compliance Calculation

If the Total Allowed Watts minus the Total Actual Watts is greater than or equal to zero, the building complies.

Total Allowed Watts = 2455
 Total Actual Watts = 845
 Project Compliance = 1610

Lighting PASSES: Design 66% better than code.



Mechanical Compliance Certificate

90.1 (2004) Standard

Report Date: 08/14/07

Data filename: J:\-COMME-1\TEXTRO-4\comcheck.cck

Section 1: Project Information

Project Title: Textron Marine & Land

Construction Site:

2585 Front Street
Slidell, LA 70458

Owner/Agent:

Teresa Bergeron
Textron Marine & Land
2585 Front Street
Slidell, LA 70458
504-254-6734

Designer/Contractor:

Pete Dammon
Dammon Engineering
1095 Florida Ave
Slidell, LA 70458
985-649-5832

Section 2: General Information

Building Location (for weather data):

Slidell, Louisiana

Heating Degree Days (base 65 degrees F):

1674

Cooling Degree Days (base 50 degrees F):

6660

Project Type:

Addition

Section 3: Mechanical Systems List

Quantity System Type & Description

- | Quantity | System Type & Description |
|----------|--|
| 2 | HVAC System 1: Heating: Central Furnace, Electric, Heating Capacity <65 kBtu/h / Cooling: Split System, Capacity >=65 - <90 kBtu/h, Air-Cooled Condenser / Single Zone |

Section 4: Requirements Checklist

Requirements Specific To: HVAC System 1 :

- 1. Newly purchased equipment meets the efficiency requirements
- 2. Equipment minimum efficiency: Split System: 10.3 EER

Generic Requirements: Must be met by all systems to which the requirement is applicable:

- 1. Load calculations per 2001 ASHRAE Fundamentals
- 2. Thermostatic controls has 5 degrees F deadband
 - Exception: Thermostats requiring manual changeover between heating and cooling
- 3. Automatic Controls: Setback to 55 degrees F (heat) and 85 degrees F (cool); 7-day clock, 2-hour occupant override, 10-hour backup
 - Exception: Continuously operating zones
- 4. Hot water pipe insulation: 1 in. for pipes <=1.5 in. and 2 in. for pipes >1.5 in. Chilled water/refrigerant/brine pipe insulation: 1 in. for pipes <=1.5 in. and 1.5 in. for pipes >1.5 in. Steam pipe insulation: 1.5 in. for pipes <=1.5 in. and 3 in. for pipes >1.5 in.
 - Exception: Piping within HVAC equipment
 - Exception: Fluid temperatures between 55 and 105 degrees F
 - Exception: Fluid not heated or cooled
 - Exception: Runouts <4 ft in length
- 5. Where separate thermostats are used for heating and cooling, acceptable measures are used to prevent simultaneous heating and cooling
- 6. Motorized, automatic shutoff dampers required on exhaust and outdoor air supply openings

- Exception: Gravity dampers acceptable in buildings <3 stories
- Exception: Gravity dampers acceptable in systems with outside or exhaust air flow rates less than 300 cfm where dampers are interlocked with fan
- 7. Stair and elevator shaft vents are equipped with motorized dampers
- 8. Acceptable measures used to prevent simultaneous humidification and dehumidification
 - Exception: Desiccant systems and systems for uses requiring specific humidity levels (approval required)
- 9. Automatic controls for freeze protection systems present
- 10. Automatic ventilation controls (e.g., CO2 controls) or exhaust air heat recovery present for high design occupancy areas (>100 person/1000 ft2) with >3,000 cfm outside air capacities
- 11. Duct, plenum, and piping insulation surfaces suitably protected from weather, moisture, or likely damage
- 12. Duct Sealing: Pressure sensitive tape is not used as the primary sealant Longitudinal and transverse seams for ducts in unconditioned spaces Longitudinal and transverse seams and duct wall penetrations for ducts outside the building Transverse seams on buried ducts
- 13. R-6 for supply air ducts located outside the building, in ventilated attics and in unvented attic above insulated ceiling R-3.5 for supply air ducts in unvented attic with roof insulation, unconditioned and underground spaces R-3.5 for return air ducts located outside the building, in ventilated attics and in unvented attic above insulated ceiling
- 14. Humidistat controls prevent reheating, recooling, and mixing of mechanically heated air with mechanically cooled air
- 15. Exhaust air heat recovery included for systems 5,000 cfm or greater with more than 70% outside air fraction or specifically exempted
- 16. Kitchen hoods >5,000 cfm provided with 50% makeup air that is uncooled and heated to no more than 60 degrees F unless specifically exempted
- 17. Buildings with fume hood systems must have variable air volume hood design, exhaust heat recovery, or separate makeup air supply meeting the following: a) 75% make up air quantity, and /or b) within 2 degrees F of room temperature and/or c) no humidification d) no simultaneous heating and cooling

Section 5: Compliance Statement

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 90.1 (2004) Standard requirements in COMcheck Version 3.4.1 and to comply with the mandatory requirements in the Requirements Checklist.

EMMETT D. HAMMILL

Name - Title



Signature

8-14-07

Date

Section 6: Post Construction Compliance Statement

- HVAC record drawings of the actual installation and performance data for each equipment provided to the owner within 90 days after system acceptance.
- HVAC O&M documents for all mechanical equipment and system provided to the owner within 90 days after system acceptance.
- Written HVAC balancing report provided to the owner.



COMcheck Software Version 3.4.1

Mechanical Requirements Description

90.1 (2004) Standard

Report Date:

Data filename: J:\-COMME~1\TEXTRO~4\comcheck.cck

The following list provides more detailed descriptions of the requirements in Section 4 of the Mechanical Compliance Certificate.

Requirements Specific To: HVAC System 1 :

1. The specified equipment is covered by Federal minimum efficiency requirements. New equipment of this type can be assumed to meet or exceed ASHRAE 90.1-2004 Standard requirements for equipment efficiency.
2. The specified heating and/or cooling equipment is covered by ASHRAE 90.1-2004 Standard and must meet the following minimum efficiency: Split System: 10.3 EER

Generic Requirements: Must be met by all systems to which the requirement is applicable:

1. Design heating and cooling loads for the building must be determined using procedures in the ASHRAE Handbook of Fundamentals or an approved equivalent calculation procedure.
2. Thermostats controlling both heating and cooling must be capable of maintaining a 5 degrees F deadband (a range of temperature where no heating or cooling is provided).
 - Exception: Deadband capability is not required if the thermostat does not have automatic changeover capability between heating and cooling.
3. The system or zone control must be a programmable thermostat or other automatic control meeting the following criteria:a) capable of setting back temperature to 55 degrees F during heating and setting up to 85 degrees F during coolingb) capable of automatically setting back or shutting down systems during unoccupied hours using 7 different day schedulesc) have an accessible 2-hour occupant overridden) have a battery back-up capable of maintaining programmed settings for at least 10 hours without power.
 - Exception: A setback or shutoff control is not required on thermostats that control systems serving areas that operate continuously.
4. All pipes serving space-conditioning systems must be insulated as follows: Hot water piping for heating systems: 1 in. for pipes <=1 1/2-in. nominal diameter 2 in. for pipes >1 1/2-in. nominal diameter. Chilled water, refrigerant, and brine piping systems: 1 in. insulation for pipes <=1 1/2-in. nominal diameter 1 1/2 in. insulation for pipes >1 1/2-in. nominal diameter. Steam piping: 1 1/2 in. insulation for pipes <=1 1/2-in. nominal diameter 3 in. insulation for pipes >1 1/2-in. nominal diameter.
 - Exception: Pipe insulation is not required for factory-installed piping within HVAC equipment.
 - Exception: Pipe insulation is not required for piping that conveys fluids having a design operating temperature range between 55 degrees F and 105 degrees F.
 - Exception: Pipe insulation is not required for piping that conveys fluids that have not been heated or cooled through the use of fossil fuels or electric power.
 - Exception: Pipe insulation is not required for runout piping not exceeding 4 ft in length and 1 in. in diameter between the control valve and HVAC coil.
5. Where zone heating and cooling are controlled by separate zone thermostats, means (such as limit switches, mechanical stops, or, for DDC systems, software programming) must be provided to prevent simultaneous heating and cooling to the zone.
6. Outdoor air supply and exhaust systems must have motorized dampers that automatically shut when the systems or spaces served are not in use. Dampers must be capable of automatically shutting off during preoccupancy building warm-up, cool-down, and setback, except when ventilation reduces energy costs (e.g., night purge) or when ventilation must be supplied to meet code requirements. Both outdoor air supply and exhaust air dampers must have a maximum leakage rate of 3 cfm/ft² at 1.0 in w.g. when tested in accordance with AMCA Standard 500.
 - Exception: Gravity (non-motorized) dampers are acceptable in buildings less than three stories in height.
 - Exception: Systems with a design outside air intake or exhaust capacity of 300 cfm (140 L/s) or less that are equipped with motor operated dampers that open and close when the unit is energized and de-energized, respectively.
7. Stair and elevator shaft vents must be equipped with motorized dampers capable of being automatically closed during normal building operation and interlocked to open as required by fire and smoke detection systems. All gravity outdoor air supply and exhaust hoods, vents, and ventilators must be equipped with motorized dampers that will automatically shut when the spaces served are not in use. Exceptions: - Gravity (non-motorized) dampers are acceptable in buildings less than three stories in height above grade. - Ventilation systems serving unconditioned spaces.

8. Where a zone is served by a system(s) with both humidification and dehumidification capability, means (such as limit switches, mechanical stops, or software programming) must be provided to prevent simultaneous operation of humidification and dehumidification equipment.
 - Exception: Zones served by desiccant systems, used with direct evaporative cooling in series; Systems serving zones where specific humidity levels are required.
9. All freeze protection systems, including self-regulating heat tracing, must include automatic controls capable of shutting off the systems when outside air temperatures are above 40 degrees F or when the conditions of the protected fluid will prevent freezing. Snow- and ice-melting systems must include automatic controls capable of shutting off the systems when the pavement temperature is above 50 degrees F and no precipitation is falling, and an automatic or manual control that will allow shutoff when the outdoor temperature is above 40 degrees F.
10. Systems with design outside air capacities >3,000 cfm serving areas having an average design occupancy density exceeding 100 people per 1000 ft² must include means to automatically reduce outside air intake below design rates when spaces are partially occupied. Ventilation controls must be in compliance with ASHRAE Standard 62 and local standards.
11. Duct and pipe insulation exposed to weather must be suitable for outdoor service; e.g., protected by aluminum, sheet metal, painted canvas, or plastic cover. Cellular foam insulation must be protected as above or painted with a coating that is water retardant and provides shielding from solar radiation that can cause degradation of the material. Insulation covering chilled water piping, refrigerant suction piping, or cooling ducts located outside the conditioned space must include a vapor retardant located outside the insulation (unless the insulation is inherently vapor retardant), all penetrations and joints of which must be sealed.
12. Duct Sealing Requirements: - Pressure sensitive tape prohibited as the primary sealant - Longitudinal and transverse seams for ducts in unconditioned spaces - Longitudinal and transverse seams and duct wall penetrations for ducts outside the building - Transverse seams on buried ducts
13. All supply and return ducts and plenum installed as part of an HVAC air distribution system must be thermally insulated: R-6 for supply air ducts located outside the building, in ventilated attics and in unvented attic above insulated ceiling, R-3.5 for supply air duct insulation in unvented attic with roof insulation, unconditioned and underground spaces, R-3.5 for return air ducts located outside the building, in ventilated attics and in unvented attic above insulated ceiling.
14. Where humidistatic controls are provided, such controls must prevent reheating, mixing of hot and cold air streams, or other means of simultaneous heating and cooling of the same air stream. Exceptions: - capability to first reduce flow rate - cooling capacity <80 kBtu/h and capability to unload cooling equipment - cooling capacity <40 kBtu/h - rigid humidity requirements - site-recovered or site-solar energy sources or - use of a desiccant systems.
15. Individual fan systems with a design supply air capacity of 5000 cfm or greater and minimum outside air supply of 70% or greater of the supply air capacity must have an energy recovery system with at least a 50% effectiveness. Exceptions: - Systems serving spaces that are not cooled and heated to <60 degrees F. - Commercial kitchen hoods (grease) classified as Type 1 by NFPA 96 - Systems exhausting toxic, flammable, paint, or corrosive fumes or dust If an air economizer is also required, heat recovery must be bypassed or controlled to permit air economizer operation.
16. Individual kitchen exhaust hoods larger than 5000 cfm must be provided with make-up air sized for at least 50% of exhaust air volume that is uncooled and either unheated or heated to no more than 60 degrees F Exceptions: - Where hoods are used to exhaust ventilation air that would otherwise exfiltrate or be exhausted by other fan systems. - Certified grease extractor hoods that require a face velocity no >60 fpm.
17. Buildings with fume hood systems having a total exhaust rate >15,000 cfm must either have variable air volume hood design, exhaust air heat recovery, or separate make up air supply meeting the following makeup air requirements: - at least 75% of exhaust flow rate - heated to no more than 2 degrees F below room setpoint temperature - cooled to no lower than 2 degrees F above room setpoint temperature - no humidification added - no simultaneous heating and cooling