

**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

H "BUTCH" BROWNING  
FIRE MARSHAL

**NEW CONSTRUCTION**

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

RE: P0374634  
CHILDRENS INTERNATIONAL MEDICAL  
GROUP  
HWY 51 BTW DE MARCO LN & MEDIC  
HAMMOND, LA 70401

NFPA 101, 2006

BUSINESS

Dear Applicant:

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. 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, IS NOT INCLUDED IN THIS REVIEW. Contact the building official of the applicable political subdivision to coordinate compliance with these requirements. LRS 40:1730.23 mandates the enforcement of building codes by municipalities and parishes in Louisiana, as described by LRS 40:1730.28.**

**Note: In accordance with LRS 40:1730.39.A, this office may establish contract agreements with municipalities and parishes in order to provide code enforcement on their behalf, as provided in LRS 40:1730.24. Please visit our web site at <http://www.dps.state.la.us/sfm/index.htm> for a current list of jurisdictions requesting plan review by this office, a fee schedule, and a checklist of information required for review.**

**PROVIDE A DUPLICATE SET OF PLANS AND SPECIFICATIONS TO THE BUILDING OFFICIAL (OR THIRD-PARTY) FOR REVIEW AND/OR PERMITTING, THE STATE FIRE MARSHAL REVIEWED AND STAMPED DOCUMENTS SHALL NOT BE USED FOR THIS PURPOSE. ADDITIONAL MARKING OR ALTERATIONS MADE TO THE APPROVED STAMPED PLANS MAY CAUSE DELAYS IN FINAL ACCEPTANCE FOR OCCUPANCY.**

- 2. 101:6.1.5 This review applies to a business occupancy classification. If four or more patients are treated at the same time making them incapable of self-preservation without assistance from others during times of emergency, then the project shall be resubmitted for review as an ambulatory health care occupancy. (See NFPA 101:18.1.3 for definition).**

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

3. **LRS 40:1730.45 and LAC 55:V:2601** The documentation provided for the subject facility does NOT appear to comply with The Commercial Building Energy Conservation Code.
  - a. **LAC 55:V:2604** The applicable standard for commercial buildings, other than low-rise residential buildings, is ANSI/ASHRAE/IESNA Standard 90.1-2004. Demonstration of compliance using COMcheck, available from the U.S. Department of Energy, with "Standard 90.1 - 2004" selected as the code option shall be deemed to comply with the Commercial Building Energy Conservation Code. Compliance must be demonstrated individually for each of three components; envelope, lighting (including electrical), and, mechanical (including hot water). Code compliance materials can be obtained from the Department of Energy's website <http://www.energycodes.gov>. Technical assistance can be obtained from the Technology Assessment division of the La. Dept. Of Natural Resources at 1-800-836-9589 (1-225-342-3842 if calling from outside Louisiana).
4. **101:38.2.10** Exit signs complying with Section 7.10 shall define exits and access to exits where the exit is not immediately apparent.
5. **101:38.3.2** Separate LAUNDRY 128 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).

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

6. This review does not include tenant build-out of the FUTURE TENANT space. Prior to any build-out of this space plans shall be submitted to the Office of State Fire Marshal for review.
7. **LRS 40:1731-(Effective 8/15/95)** Provide access to persons with disabilities 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 deficiencies and paragraph references are noted as follows:
  - a) **4.1.3(13)** Provide a maximum counter height of 34" at sink OR provide a maximum counter height of 36" at sink if knee space exists under sink.
8. **LRS 40:1711** Provide safety glazing in hazardous locations at entrance doors.
9. **101:7.2.1.5.9** Doors shall be capable of being opened with ONLY one releasing operation. A two-step release, such as a knob and an independent slide bolt, or an additional exit request button, is NOT acceptable.
10. **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 or floor 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.

11. **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.**
12. **NFPA 10:5.1.4 Provide portable fire extinguishers within the following travel distances; rectilinear route measure:**
  - a) **Travel distance to a fire extinguisher shall not exceed 75 feet for Class A, C and D fires. Table 10:5.2.1 and 10:5.5 and 10:5.6.**
  - b) **Travel distance to a fire extinguisher shall not exceed 30 feet for Class B fires (liquids). (May be increased to 50 feet for Light (low) Hazard fires with 10-B extinguisher, for Ordinary (moderate) Hazard fires with 20-B extinguisher, and for Extra (high) Hazard fires with 80-B extinguisher.) Table 10:5.3.1.**
  - c) **Travel distance to a fire extinguisher shall not exceed 30 feet for Class K fires (cooking appliances). NFPA 10:5.7**

**For classification of Hazards see 10:1.4.1 (Light/Low), 10:1.4.2 (Ordinary/Moderate): 10:1.4.3 (Extra/High)**
13. **NFPA 10:1.5.10 Top of fire extinguisher, having a gross weight less than 40 lb, shall be not more than 5 feet above the floor; if gross weight 40 lbs or greater, 3-1/2 feet above the floor.**
14. **NFPA 70:517.13 Wiring in "PATIENT CARE AREAS" shall comply with NFPA 70:517.13(A) and (B). (ROMEX IS NOT ACCEPTABLE).**
15. **HVAC system shall be constructed in accordance with 101:9.2.**
16. **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 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.**

**Fire Department access and water supplies within the scope of work shall be acceptable to the local fire department. Submit to the State Fire Marshal inspector, a review letter from the local fire department, stating that the access and water supply as proposed are acceptable. In lieu of a review letter, where the local fire department does not provide a formal review, the local fire department may indicate review of the access and water supplies by stating such on the plans bearing the State Fire Marshal review stamp.**

REVIEWED BY:  
OTIS RAMKE  
ARCHITECT

CC:  
Childrens International Medical Group  
Hammond Fire Prevention Bureau\*  
Hammond Building Inspector\*  
Baton Rouge District\* 2259253650



COMcheck Software Version 3.7.0

# Envelope Compliance Certificate

SEE ITEM # 3 IN REVIEW LETTER

2006 IECC

## Section 1: Project Information

Project Type: **New Construction**

Project Title : Children's International Medical Group

Construction Site:  
Hammond, LA

Owner/Agent:  
Dr. Eddie Hernandez  
LA

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

## Section 2: General Information

Building Location (for weather data): **Slidell, Louisiana**  
Climate Zone: **2a**  
Vertical Glazing / Wall Area Pct.: **6%**

**Activity Type(s)** **Floor Area**  
Healthcare-Clinic 5000

## Section 3: Requirements Checklist

**Envelope PASSES: Design 31% 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 <sup>(a)</sup>
Roof 1: Metal Building, Standing Seam	5000	40.0	40.0	0.016	0.065
Exterior Wall 1: Metal Building Wall	3000	13.0	13.0	0.046	0.113
Window 1: Metal Frame:Double Pane with Low-E, Tinted, SHGC 0.32, PF 0.21	100	---	---	0.160	0.750
Door 1: Glass (> 50% glazing), Entrance Door, SHGC 0.32, PF 0.15	85	---	---	0.160	1.100

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

### Air Leakage, Component Certification, and Vapor Retarder Requirements:

- 1. All joints and penetrations are caulked, gasketed or covered with a moisture vapor-permeable wrapping material installed in accordance with the manufacturer's installation instructions.
- 2. Windows, doors, and skylights certified as meeting leakage requirements.
- 3. Component R-values & U-factors labeled as certified.
- 4. 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.
- 5. No roof insulation is installed on a suspended ceiling with removable ceiling panels.
- 6. 'Other' components have supporting documentation for proposed U-Factors.
- 7. Stair, elevator shaft vents, and other outdoor air intake and exhaust openings in the building envelope are equipped with motorized dampers.
- 8. Cargo doors and loading dock doors are weather sealed.
- 9. Recessed lighting fixtures are: (i) Type IC rated and sealed or gasketed; or (ii) installed inside an appropriate air-tight assembly with a 0.5 inch clearance from combustible materials and with 3 inches clearance from insulation material.

Note: Vapor retarder not required in this location.

#### 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 2006 IECC requirements in COMcheck Version 3.7.0 and to comply with the mandatory requirements in the Requirements Checklist.

Emmett Dammun  
Name - Title

  
Signature

12.15.09  
Date



COMcheck Software Version 3.7.0

# Interior Lighting Compliance Certificate

**2006 IECC**

SEE ITEM # 3 IN  
REVIEW LETTER

## Section 1: Project Information

Project Type: **New Construction**

Project Title : Children's International Medical Group

Construction Site:  
Hammond, LA

Owner/Agent:  
Dr. Eddie Hernandez  
LA

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

## Section 2: General Information

Building Use Description by: **Activity Type**

**Activity Type(s)**  
Healthcare-Clinic

**Floor Area**  
5000

## Section 3: Requirements Checklist

### Interior Lighting:

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

Allowed Watts	Proposed Watts	Complies
5000	4360	YES

### Controls, Switching, and Wiring:

2. Independent controls for each space (switch/occupancy sensor).

*Exceptions:*

Areas designated as security or emergency areas that must be continuously illuminated.

Lighting in stairways or corridors that are elements of the means of egress.

3. Master switch at entry to hotel/motel guest room.
4. Individual dwelling units separately metered.
5. Each space provided with a manual control to provide uniform light reduction by at least 50%.

*Exceptions:*

Only one luminaire in space;

An occupant-sensing device controls the area;

The area is a corridor, storeroom, restroom, public lobby or sleeping unit.

Areas that use less than 0.6 Watts/sq.ft.

6. Automatic lighting shutoff control in buildings larger than 5,000 sq.ft.

*Exceptions:*

Sleeping units, patient care areas; and spaces where automatic shutoff would endanger safety or security.

7. Photocell/astromical time switch on exterior lights.

*Exceptions:*

Lighting intended for 24 hour use.

8. Tandem wired one-lamp and three-lamp ballasted luminaires (No single-lamp ballasts).

*Exceptions:*

Electronic high-frequency ballasts; Luminaires on emergency circuits or with no available pair.

## 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 2006 IECC requirements in COMcheck Version 3.7.0 and to comply with the mandatory requirements in the Requirements Checklist.

Emmett Dammon  
Name - Title

  
Signature

12-15-09  
Date



# Interior Lighting Application Worksheet

**2006 IECC**

*SEE ITEM #3 IN REVIEW LETTER*

## Section 1: Allowed Lighting Power Calculation

A Area Category	B Floor Area (ft <sup>2</sup> )	C Allowed Watts / ft <sup>2</sup>	D Allowed Watts (B x C)
Healthcare-Clinic	5000	1	5000
Total Allowed Watts =			5000

## Section 2: Proposed 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)
Healthcare-Clinic (5000 sq.ft.)				
Linear Fluorescent 1: 48" T8 32W / Electronic	2	33	100	3300
Linear Fluorescent 2: 24" T8U 32W / Electronic	2	14	50	700
Incandescent 1: Incandescent 50W	1	8	45	360
Total Proposed Watts =				4360

## Section 3: Compliance Calculation

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

Total Allowed Watts = 5000  
 Total Proposed Watts = 4360  
 Project Compliance = 640

**Interior Lighting PASSES:** Design 13% better than code.



# Exterior Lighting Compliance Certificate

**2006 IECC**

SEE ITEM # 3 IN REVIEW LETTER

## Section 1: Project Information

Project Type: **New Construction**

Project Title : Children's International Medical Group

Construction Site:  
Hammond, LA

Owner/Agent:  
Dr. Eddie Hernandez  
LA

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

## Section 2: Exterior Lighting Area/Surface Power Calculation

A Exterior Area/Surface	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (C x D)	F Proposed Watts
Main entry/exit	12 ft of door width	30	Yes	360	300
				Total Tradable Watts* =	360
				Total Allowed Watts =	360
				Total Allowed Supplemental Watts** =	18

\* Wattage tradeoffs are only allowed between tradable areas/surfaces.

\*\* A supplemental allowance equal to 5% of total allowed wattage may be applied toward compliance of both non-tradable and tradable areas/surfaces.

## Section 3: Exterior Lighting Fixture Schedule

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)	
Main entry/exit (12 ft of door width): Tradable Wattage Incandescent 1: Incandescent 50W	1	6	50	300	
				Total Tradable Proposed Watts =	300

## Section 4: Requirements Checklist

### Lighting Wattage:

- 1. Within each non-tradable area/surface, total proposed watts must be less than or equal to total allowed watts. Across all tradable areas/surfaces, total proposed watts must be less than or equal to total allowed watts.

Compliance: Passes.

### Controls, Switching, and Wiring:

- 2. All exemption claims are associated with fixtures that have a control device independent of the control of the nonexempt lighting.
- 3. All lighting fixtures are controlled by a photosensor or astronomical time switch that is capable of automatically turning off the fixture when sufficient daylight is available or the lighting is not required.

Exceptions:

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

### Exterior Lighting Efficacy:

- 4. All exterior building grounds luminaires that operate at greater than 100W have minimum efficacy of 60 lumen/watt.

*Exceptions:*

Controlled by motion sensor or exempt from consideration under the provisions of Section 505.6.2.

Exterior Lighting **PASSES**: Design 21% better than code.

### Section 5: Compliance Statement

*Compliance Statement:* The proposed exterior 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 2006 IECC requirements in COMcheck Version 3.7.0 and to comply with the mandatory requirements in the Requirements Checklist.

*Emmett Dammon*

Name - Title



Signature

*12-15-09*

Date



COMcheck Software Version 3.7.0

# Mechanical Compliance Certificate

2006 IECC

SEE ITEM # 3 IN  
REVIEW LETTER

## Section 1: Project Information

Project Type: **New Construction**

Project Title : Children's International Medical Group

Construction Site:  
Hammond, LA

Owner/Agent:  
Dr. Eddie Hernandez  
LA

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

## Section 2: General Information

Building Location (for weather data):  
Climate Zone:

**Slidell, Louisiana**  
**2a**

## Section 3: Mechanical Systems List

### Quantity System Type & Description

- |   |   |
|---|---|
| 2 | HVAC System 1: Heating: Central Furnace, Electric, Capacity 10 kBtu/h / Cooling: Split System, Capacity 60 kBtu/h, Efficiency: 13.00 SEER, Air-Cooled Condenser / Single Zone |
| 1 | Water Heater 1: Electric Storage Water Heater, Capacity: 40 gallons, Efficiency: 0.88 EF  |

## Section 4: Requirements Checklist

### Requirements Specific To: HVAC System 1 :

1. Equipment minimum efficiency: Split System: 10.0 SEER

### Requirements Specific To: Water Heater 1 :

1. Hot water system sized per manufacturer's sizing guide
2. Electric Water Heater efficiency: 0.9 EF (241 SL, Btu/h (if > 12 kW))
3. First 8 ft of outlet piping is insulated
4. Hot water storage temperature adjustable down to 120 degrees F or lower
5. Heat traps provided on inlet and outlet of storage tanks

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

1. Load calculations per ASHRAE Fundamentals
2. Plant equipment and system capacity no greater than needed to meet loads
- Exception: Standby equipment automatically off when primary system is operating
  - Exception: Multiple units controlled to sequence operation as a function of load
3. Minimum one temperature control device per system
4. Minimum one humidity control device per installed humidification/dehumidification system
5. 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
  - Exception: 2 kW demand or less, submit calculations
6. Outside-air source for ventilation; system capable of reducing OSA to required minimum
7. R-5 supply and return air duct insulation in unconditioned spaces R-8 supply and return air duct insulation outside the building R-8 insulation between ducts and the building exterior when ducts are part of a building assembly

- Exception: Ducts located within equipment
- Exception: Ducts with interior and exterior temperature difference not exceeding 15 degrees F.
- Exception: Continuously welded and locking-type longitudinal joints and seams on ducts operating at static pressures less than 2 inches w.g. pressure classification
- 8. Mechanical fasteners and sealants used to connect ducts and air distribution equipment
- 9. Ducts sealed - longitudinal seams on rigid ducts; transverse seams on all ducts; UL 181A or 181B tapes and mastics
- 10. 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 with renewable energy.
  - Exception: Runouts <4 ft in length.
- 11. Operation and maintenance manual provided to building owner
- 12. Piping, insulated to 1/2 in. if nominal diameter of pipe is <1.5 in.; Larger pipe insulated to 1 in. thickness
- 13. Lavatory faucet outlet temperatures in public restrooms limited to 110 degrees F (43 degrees C)
- 14. Thermostatic controls have 5 degrees F deadband
  - Exception: Thermostats requiring manual changeover between heating and cooling
  - Exception: Special occupancy or special applications where wide temperature ranges are not acceptable and are approved by the authority having jurisdiction.
- 15. Balancing devices provided in accordance with IMC (2006) 603.17
- 16. 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
- 17. Stair and elevator shaft vents are equipped with motorized dampers
- 18. Exhaust air heat recovery included for systems 5,000 cfm or greater with more than 70% outside air fraction or specifically exempted

## 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 2006 IECC requirements in COMcheck Version 3.7.0 and to comply with the mandatory requirements in the Requirements Checklist.

*Emmett Dammon*

Name - Title

*Emmett Dammon*

Signature

*12-15-09*

Date



# Mechanical Requirements Description

2006 IECC

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 heating and/or cooling equipment is covered by ASHRAE 90.1 Code and must meet the following minimum efficiency: Split System: 10.0 SEER

## Requirements Specific To: Water Heater 1 :

1. Service water heating system design loads for the purpose of sizing systems and equipment must be determined in accordance with manufacturers' published sizing guidelines.
2. Service water heating equipment used solely for heating potable water, pool heaters, and hot water storage tanks must meet the following minimum efficiency: Electric Water Heater efficiency: 0.9 EF (241 SL, Btu/h (if > 12 kW))
3. Insulation must be provided for the first 8 ft of outlet piping for a constant temperature nonrecirculating storage system and for the inlet pipe between the storage tank and a heat trap in a storage system.
4. Temperature controls must be provided that allow for storage temperature adjustment from 120 degrees F or lower to a maximum temperature compatible with the intended use except when the manufacturer's installation instructions specify a higher minimum thermostat setting to minimize condensation and resulting corrosion. Documentation of the installation instructions must be provided to be exempted from this requirement.
5. Heat traps must be provided on inlet and outlet vertical pipe risers serving storage water heaters and storage tanks not having integral heat traps and serving a nonrecirculating system. Heat traps must be installed as close as practical to the storage tank. Acceptable heat traps are either a) a device specifically designed for the purpose or b) an arrangement of tubing that forms a loop of 360 degrees F, or c) piping that from the point of connection to the water heater (inlet or outlet) includes a length of piping directed downwards before connection to the vertical piping of the supply water or hot water distribution system.

## 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. All equipment and systems must be sized to be no greater than needed to meet calculated loads. A single piece of equipment providing both heating and cooling must satisfy this provision for one function with the capacity for the other function as small as possible, within available equipment options.
  - Exception: The equipment and/or system capacity may be greater than calculated loads for standby purposes. Standby equipment must be automatically controlled to be off when the primary equipment and/or system is operating.
  - Exception: Multiple units of the same equipment type whose combined capacities exceed the calculated load are allowed if they are provided with controls to sequence operation of the units as the load increases or decreases.
3. Each heating or cooling system serving a single zone must have its own temperature control device.
4. Each humidification system must have its own humidity control device.
5. 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 cooling, b) capable of automatically setting back or shutting down systems during unoccupied hours using 7 different day schedules, c) have an accessible 2-hour occupant override, d) 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.
  - Exception: A setback or shutoff control is not required on systems with total energy demand of 2 kW (6,826 Btu/h) or less.
6. The system must supply outside ventilation air as required by Chapter 4 of the International Mechanical Code. If the ventilation system is designed to supply outdoor-air quantities exceeding minimum required levels, the system must be capable of reducing outdoor-air flow to the minimum required levels.
7. Air ducts must be insulated to the following levels: a) Supply and return air ducts for conditioned air located in unconditioned spaces (spaces neither heated nor cooled) must be insulated with a minimum of R-5. Unconditioned spaces include attics, crawl spaces, unheated basements, and unheated garages. b) Supply and return air ducts and plenums must be insulated to a minimum of R-8 when located outside the building. c) When ducts are located within exterior components (e.g., floors or roofs), minimum R-8 insulation is required only between the duct and the building exterior.
  - Exception: Duct insulation is not required on ducts located within equipment.

- Exception: Duct insulation is not required when the design temperature difference between the interior and exterior of the duct or plenum does not exceed 15 degrees F.
  - Exception: Continuously welded and locking-type longitudinal joints and seams on ducts operating at static pressures less than 2 inches w.g. pressure classification.
8. Mechanical fasteners and seals, mastics, or gaskets must be used when connecting ducts to fans and other air distribution equipment, including multiple-zone terminal units.
  9. All joints, longitudinal and transverse seams, and connections in ductwork must be securely sealed using weldments; mechanical fasteners with seals, gaskets, or mastics; mesh and mastic sealing systems; or tapes. Tapes and mastics must be listed and labeled in accordance with UL 181A and shall be marked '181A-P' for pressure sensitive tape, '181A-M' for mastic or '181A-H' for heat-sensitive tape. Tapes and mastics used to seal flexible air ducts and flexible air connectors shall comply with UL 181B and shall be marked '181B-FX' for pressure-sensitive tape or '181B-M' for mastic. Unlisted duct tape is not permitted as a sealant on any metal ducts.
  10. 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.
  11. Operation and maintenance documentation must be provided to the owner that includes at least the following information: a) equipment capacity (input and output) and required maintenance actions b) equipment operation and maintenance manuals c) HVAC system control maintenance and calibration information, including wiring diagrams, schematics, and control sequence descriptions; desired or field-determined set points must be permanently recorded on control drawings, at control devices, or, for digital control systems, in programming comments d) complete narrative of how each system is intended to operate.
  12. Service hot water piping, where required, must be insulated to 1/2 in. if pipe less than 1.5 in. nominal diameter. Larger pipe must be insulated to 1 in.. Pipe insulation will have a conductivity of less than 0.28 Btu.in/(h-ft2-degrees F).
  13. Temperature controlling means must be provided to limit the maximum temperature of water delivered from lavatory faucets in public facility restrooms to 110 degrees F.
  14. 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.
    - Exception: Special occupancy or special applications where wide temperature ranges are not acceptable and are approved by the authority having jurisdiction.
  15. Balancing devices provided in accordance with IMC (2006) 603.17.
  16. 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.
  17. 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.
    - Exception: Gravity (non-motorized) dampers are acceptable in buildings less than three stories in height above grade.
    - Exception: Ventilation systems serving unconditioned spaces.
  18. 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. If an air economizer is also required, heat recovery must be bypassed or controlled to permit air economizer operation.
    - Exception: Systems serving spaces that are not cooled and heated to <60 degrees F.
    - Exception: Commercial kitchen hoods (grease) classified as Type 1 by NFPA 96.
    - Exception: Systems exhausting toxic, flammable, paint, or corrosive fumes or dust.
    - Exception: Where the largest exhaust source is less than 75% of the design outdoor airflow.
    - Exception: Systems requiring dehumidification that employ energy recovery in series with the cooling coil.



State of Louisiana  
Office of State Fire Marshal  
8181 Independence Blvd.  
Baton Rouge, LA 70806

<b>Project #:</b>	<b>374634</b>
<b>Receipt #:</b>	<b>6807823</b>
<b>Amount:</b>	<b>85.00</b>
<b>Date:</b>	<b>2009-12-17</b>

**MAIL TO:**

DAMMON ENGINEERING, INC.  
P. O. BOX 2830  
SLIDELL, LA 70459 -



This Receipt CANNOT BE USED TO OBTAIN A BUILDING PERMIT. Only the REVIEW LETTER from this office may serve for that purpose. Please provide the PROJECT NUMBER and DATE of this receipt when corresponding with this office regarding this project.

<b>Invoice Number</b>	<b>Invoice Description</b>	<b>Proj. No.</b>	<b>Invoice Date</b>	<b>Amount Received</b>	<b>Balance Due</b>
10029650	CHILDRENS INTERNATIONAL MEDIC	374634	2009-12-17	85.00	0.00

NOTE: ANY balance due shown above must be received by this office within 14 days from the date of this receipt. The final balance due will be included in the architect's final Plan Review Report.