FIRESTOP CONTACTORS INT’L ASSOC.
OMNI LA MANSION DEL RIO,
SAN ANTONIO APRIL 30, 2014
Contact Information

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512-438-4623 FAX
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### Facility Totals in Texas
March 10, 2014

<table>
<thead>
<tr>
<th>Service</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult Day Care</td>
<td>471</td>
</tr>
<tr>
<td>Assisted Living</td>
<td>1,737</td>
</tr>
<tr>
<td>ICF-IID/RC</td>
<td>861</td>
</tr>
<tr>
<td>Nursing</td>
<td>1,221</td>
</tr>
<tr>
<td>Total Facilities</td>
<td>4,290</td>
</tr>
<tr>
<td>HCSSA agencies</td>
<td>6,309</td>
</tr>
</tbody>
</table>
3. Safety Code Standard:

• NFPA 101, K-TAG 0025

• The facility failed to provide smoke walls that provide required fire-resistance rating.

• (Ranked No. 3 in fiscal year 2011)
ONE HOUR SMOKE BARRIER

1 HOUR SMOKEWALL (UL 305)

4,079 SQUARE FEET

3 HOUR FIREWALL (UL 419)

WING 100 SMOKEZONE
8,641 SQUARE FEET

CENTRAL SMOKEZONE
15,911 SQUARE FEET

1 HOUR SMOKEWALL (UL 305)

5,453 SQUARE FEET

WING 400 SMOKEZONE
5,453 SQUARE FEET

1 HOUR SMOKEWALL (UL 305)

SMOKE ZONE DIAGRAM
Smoke Barriers in Health Care

• Smoke barriers shall be provided in new health care occupancies with a fire resistance rating of 1 hour.  
  LSC 18.3.7

• Smoke barriers shall be provided in existing health care occupancies with a fire resistance rating of \( \frac{1}{2} \) hour.  
  LSC 19.3.7
Openings and Penetrations

- Penetrations in smoke barrier wall assemblies must be firestopped.
  LSC §8.2.3.1

- Through-penetration: An opening that passes through an entire assembly. (2006 IBC, §702)

- Membrane-penetration: An opening made through one side (wall, floor or ceiling membrane) of an assembly. (2006 IBC, §702).
Openings and Penetrations

- Through-penetrations in floor-ceiling assemblies must be firestopped, or classified and protected as vertical openings. LSC §8.2.5
Openings and Penetrations

Products and their assemblies used to protect penetrations in a fire-rated assembly must be tested for use in that type of assembly and for that penetration/application.

• Firestopping products are not rated unless installed per a tested assembly
• Cut sheets are not enough information.

You MUST see the listing and/or assembly itself
Openings and Penetrations

Common Through-penetrations

• Metallic pipe / conduit (Plumbing, Electrical, Fire Sprinkler)
• Combustible Pipe / Conduit (PVC, CPVC), Combustible wiring
• HVAC / exhaust ductwork
• Kitchen hood exhaust ducts
Openings and Penetrations

- Electrical boxes (Low Voltage and 120/240 V)
- Metallic versus Non-Metallic (Listing vs. Classification)
Openings and Penetrations

Plumbing that exits the wall cavity
- Sink drains
- Sink and toilet supply lines
- Shower supply and controls
- Cleanout covers
Openings and Penetrations

- HVAC registers / grilles
- Recessed fire extinguisher cabinets
Openings and Penetrations

- Recessed medicine cabinets
- Recessed toilet tissue dispensers
- All-thread supports, toggle bolt anchors
Openings and Penetrations

- Sprinkler pipe extending to a lower ceiling
- Sprinkler heads without escutcheon or holes larger than allowed by listing
- Recessed “Memory Boxes”
- Structural Expansion Joints
Openings and Penetrations

Recessed lighting fixtures
# Openings and Penetrations

## Recessed lighting fixtures

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Category Name</th>
<th>Link to File</th>
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</thead>
<tbody>
<tr>
<td>CAPRI LIGHTING, DIV OF GENLYTE</td>
<td>Luminaires, Luminaire Assemblies and Luminaire Enclosures Classified for Fire Resistance</td>
<td>CDNH.021924</td>
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<tr>
<td>THOMAS GROUP LLC</td>
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<tr>
<td>FAHRENHEIT TECHNOLOGIES CORP</td>
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<tr>
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<td>GROUP LLC</td>
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<td>PRESCOLLITE INC</td>
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<td>PROGRESS LIGHTING INC</td>
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<td>TENMAT INC</td>
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Model number information is not published for all product categories. If you require information about a specific model number, please contact Customer Service for further assistance.

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Openings and Penetrations

Recessed lighting fixtures
-not acceptable
Openings and Penetrations

Read the listing, not just the cut sheet
Openings and Penetrations

Read the listing, not just the cut sheet
Openings and Penetrations

- Fire sprinklers
- Solid metal escutcheons
Testing and Approvals

- UL Listed vs. Classified
- Warnock Hersey Mark
- FM Approved
CPVC PENETRATIONS

SYSTEM COMPATIBLE
eMi Port Salut - Haiti
ONE HOUR SMOKE BARRIER
ONE HOUR SMOKE BARRIER
ONE HOUR SMOKE BARRIER
ONE HOUR SMOKE BARRIER
ONE HOUR SMOKE BARRIER
ONE HOUR SMOKE BARRIER
ONE HOUR CEILING ROOF ASSEMBLY

EXTEND COMBUSTION AIR DUCT 6" ABOVE ATTIC INSULATION.

SEAL ALL PENETRATIONS WITH FIRE CAULK, DRYWALL COMPOUND NOT ACCEPTABLE.

TWO (2) COMBUSTION AIR DUCTS REQUIRED PER 2003 INTERNATIONAL FUEL GAS CODE. SEE COMBUSTION AIR SCHEDULE FOR DUCT SIZE.
ONE HOUR CEILING ROOF ASSEMBLY
ONE HOUR CEILING ROOF ASSEMBLY
ONE HOUR CEILING ROOF ASSEMBLY

ASSEMBLY: GA FILE NO. RC 2002

FRAMING - ALL 5 SIDES

SCREWS BASE LAYER - 1 7/8" TYPE IV OR 5/8" 12" NAIL

SCREWS FACE LAYER - 1 1/2" TYPE C @ 12" NAIL & 2" BACK OF END JOINS BOTH SIDES

2 LAYERS OF TYPE-X 5/8" OR 3/8" RECESSED CAN LIGHT

UL LISTED CEILING / FLOOR OR ROOF ASSEMBLY

TRUSS BEARING ELEVATION

RECESSED LIGHT 1-HR PROTECTION

5' x 4'-6"
ONE HOUR CEILING ROOF ASSEMBLY
Fire stopping at barrier at roof deck
Fire stopping at barrier at roof deck
La Palabra de Vida - Costa Rica
La Palabra de Vida - Costa Rica
El Rama, Nicaragua
El Rama, Nicaragua
El Rama, Nicaragua
Thank you, any questions?