

# THERMO-PAN®

Patented

## Manufacturer's TECHNICAL & INSTALLATION INSTRUCTIONS

ICC Legacy Report 95-41.01 ICC Legacy Report 5398

### 1. Position first section of THERMO-PAN® as follows:

#### A. STARTING BEFORE RETURN AIR TRUNK IS INSTALLED:

Center THERMO-PAN® between joists and at least 2" past top side of duct to provide a tight seal when final trunk is installed. Secure side to bottom of joists by stapling every 2 inches – print side out.

#### B. STARTING AT EXISTING RETURN AIR TRUNK, BEAM OR WALL PLATE:

Score 1" lip across the end of panel and bend down 90°. Center THERMO-PAN® between bottom of joists. Butt tightly against existing trunk, plate or beam and tape seam, using UL181A approved aluminum tape. Secure sides to bottom of joists by stapling approximately every 2 inches. **For code, printed side out.**

**2. To add next section:** Insert THERMO-CONNECTOR™ at the end of previously installed sheet. Center THERMO-PAN® between bottom of joists, insert one end of new sheet into open lip of THERMO-CONNECTOR™ and secure sides using 3/8" staples approximately every 2 inches. **For code, printed side out!** A UL181A approved aluminum tape may be used in place of THERMO-CONNECTORS™. Before taping the seam, butt tightly against edge of previously installed sheet. Continue until length of return air is reached.

**3. Install Header:** Bend THERMO-HEADER™ inward to close off open end of return air joist space. While maintaining a tight fit, secure the top and header sides with 3/8" staples approximately every 2 inches. **For code, printed side out.**

**Note A.** THERMO-PAN® is perfectly designed to allow you to construct an efficient and noise-free return air duct. As a manufacturer, we wholeheartedly lend our approval to the use of THERMO-PAN® in return air applications, whether or not the duct is concealed.

**B.** There is no difference as to whether the application is to the side or bottom of the joist. Open web trusses pose no problem. The product characteristics, as spelled out in ICC Legacy Report 95-41.01 (June, 2003) for pressure, collapse, water vapor transmission, surface burning, mold growth and humidity hold true regardless of the position.

**C.** Jumping joists with metal duct or piping is permissible as long as the duct/piping is properly connected to THERMO-PAN® and is not dependent on the THERMO-PAN® in any way for support.

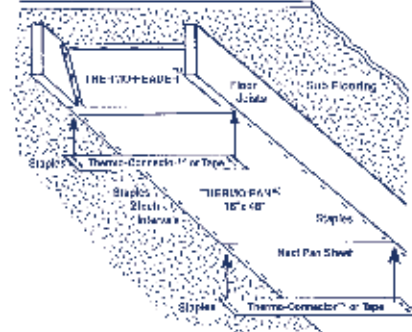
**D.** The intersection of THERMO-PAN® with copper, sheet metal or iron poses no problem with regard to any catalytic reaction that may occur between dissimilar metals. Such reaction, if any, would be negligible and of no consequence to the installation.

**E.** Sheet metal screws, roofing nails and steel staples are all approved THERMO-PAN® attachment systems. Joist or stud construction may be of either wood or steel.

**F.** Air space in the corrugated medium provides positive R-value (R-5 @90°F/32°C). R-8, if doubled. Call 888-678-3709 for test data.

**G.** Will not sustain combustion in either Standard (flame spread 35 / smoke developed 25) or Fire-Resistant (flame spread 15 / smoke developed 5) forms. Call 888-678-3709 for test data.

**H.** These instructions apply to both Standard and Fire-Resistant forms of the product.



### Product Characteristics:

- No shop fabrication; user friendly – no cut hands.
- No 'oilcanning' or duct noises to generate contractor callback.
- Air space in the corrugated medium provides positive R-value.
- Stapling as directed results in a plenum air seal tighter than sheet metal.
- Enviro-friendly; made from recycled products. Moisture treated against dampness.
- All popular joist sizes; pre-formed headers (for both regular joists and I-joists) also available.
- Will not sustain combustion.

**RESTRICTIONS:** No code restrictions for any residential installation unless a fire-rated assembly is specifically stipulated. THERMO-PAN® may be applied to both stud cavity and joist space plenums. The 2003 International Code Commentary – Section 602.3 states, " Note that the code does not mention the type of materials allowed for panning the bottom of open joists to create joist space plenums. Traditionally, sheet metal has been used, however composite materials are also used." PATENTED USA and CANADA

## PERFORMANCE VERIFIED TO UL 723 TEST STANDARD

Look for these ETL® test values on every piece of Fire-Resistant Thermo-Pan®

**Flame Spread Index 15**  
**Smoke Index 5**

**CLASS 1 FIRE RATING**

### OTHER THERMO-PAN PRODUCTS AVAILABLE

PRODUCT	ORDER #	SIZE	PC/BOX
THERMO-PAN	16048	16" x 47.5"	25
THERMO-PAN	19048	19.5" x 47.5"	25
THERMO-PAN	22048	22" x 47.5"	25
THERMO-PAN	24048	24" x 47.5"	25
THERMO-PAN	32036	32" x 35.5"	25
THERMO-PAN	32039	32" x 39.5"	25

PRODUCT	ORDER #	SIZE	PC/BOX
STANDARD HEADER	16012	16" x 12"	250
STANDARD HEADER	16016	16" x 16"	250
I-JOIST HEADER	16017	16" x 17"	250
I-JOIST HEADER	16019	19" x 16"	250

### OTHER FIRE-RESISTANT PRODUCTS

Fire-Resistant Product	ORDER #	SIZE	PC/BOX
THERMO-PAN	16050	16" x 47.5"	25
THERMO-PAN	19050	19.5" x 47.5"	25
THERMO-PAN	24050	24" x 47.5"	25
THERMO-PAN*	28050	28" x 47.5"	25
THERMO-PAN	32050	32" x 35.5"	25

Fire-Resistant Product	ORDER #	SIZE	PC/BOX
STANDARD HEADER	16013	16" x 12"	250
STANDARD HEADER	16015	16" x 16"	250
I-JOIST HEADER	16018	16" x 17"	250
I-JOIST HEADER	16020	19" x 16"	250

\* Unscored