# Tempra 4000 and Fire Front 4050 Systems

## **MR-MANUFACTURER**

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Chicago Metallic is an industry leader in roll forming suspension systems for acoustical ceilings and Decorative Metal ceiling products for Commercial, Institutional, and Industrial Building Markets. With manufacturing plants in Chicago, Illinois; Baltimore, Maryland; Los Angeles, California; and Antwerp Belgium, Chicago Metallic has the capacity to provide an extensive line of quality products worldwide.

Chicago Metallic is a division of the Chicago Metallic Corporation.

### **PP-PRODUCT PRESENTATION**

Tempra 4000 gives a designer the creative edge in selection of a distinguished ceiling appearance. Originally designed for use with geometrically routed acoustical tiles, Tempra 4000 may also be used with square and reveal-edge ceiling panels. This system reintroduces the standard "T" profile as a narrower 9/16" capped face, which becomes an invisible part of the routed acoustical material. Fire Front 4050 is the fire-rated version of the Tempra system with all the same features and benefits.

Cross tees are offered with either a hook over end tab or staked on clip end tab for the 4000 System. The Fire Front 4050 System cross tees are available with staked on clip end tabs only.

Tempra 4000 and Fire Front 4050 are available in a wide range of paint coated colors and reflective finishes.

## **TS-TECHNICAL SUPPORT**

# **Specification Guidelines for Tempra 4000 and Fire Front 4050 Systems**

Section 09500 - Acoustical Treatment

#### PART 1 - GENERAL

1.01 Section Includes Provide metal suspension system for acoustical lay-in panel ceiling.

#### 1.02 Related Sections

- A. Section 09120 Ceiling Suspension Systems
- B. Section 09545 Special Ceiling Surfaces
- C. Section 13020 Integrated Ceilings
- D. Section 13080 Sound, Vibration, and Seismic Control
- E. Section 15500 Heating, Ventilating, and Air Conditioning
- F. Section 16500 Lighting

1.03 References

A. American Society for Testing and Materials (ASTM)

- 1. C635 Standard Specification for the Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and Lay-In Panel Ceilings.
- 2. C636 Standard Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-In Panels.
- B. Underwriters Laboratories (U.L.) Fire Resistance Directory (latest edition).

### 1.04 Submittals

- A. Product data sheets listing dimensions, load carrying capacity and standards compliance.
- B. Samples: 12 inch long samples of main runner and cross tee with end couplings.

1.05 Project Conditions

A. Environmental Requirements:

- 1. Verify weathertightness of area to receive suspension system prior to installation.
- 2. Wet trades work shall be dry and complete prior to installation.
- 3. Installation to begin only when temperature and humidity conditions closely approximate interior conditions which will exist when area is complete and occupied.
- 4. Heating and air conditioning systems to be operating prior to, during, and after installation.

1.06 Maintenance

Furnish additional material equal to \_\_\_\_\_ percent of ceiling area.

# PART 2 - PRODUCTS

2.01 Manufacturer(s)

Chicago Metallic Tempra (4000C) (Fire Front<sup>™</sup> 4050C) Intermediate Duty Suspension System.

- 2.02 Suspension System Components
  - A. Main Runners:
    - 1. Manufactured from 0.018 inch thick steel 9/16 inch wide by 1-1/2 inches by (120) (144) inches long with factory punched cross tee slots, hanger holes, and integral bayonet-style end couplings.
    - 2. Capped with (steel with standard [select color] factory-applied baked-on enamel paint) (anodized aluminum) reflective [chrome coat] [brass coat]) finish. NOTE: anodized aluminum capping for non-rated components only.
    - 3. Manufactured with self-centering mechanisms for ceiling panels.
    - 4. Manufactured with fire expansion reliefs on fire-rated components.
  - B. Cross Tees:
    - 1. Manufactured from (0.012) (0.015) (0.018) inch thick steel 9/16 inch wide by 1-1/2 inches high by (12) (20) (24) (30) (36) (48) (60) inches long with factory punched cross tee slots, hanger holes, and (hook over), (staked on clip) end tab couplings.
    - 2. Capped identical to main runners.
  - 3. Manufactured with self-centering mechanisms for ceiling panels.
  - C. Perimeter Treatment Components:
    - 1. Angle Moldings: Manufactured from 0.020 inch thick steel (9/16) (3/4) (15/16) inch wide by 15/16 inch high by (120) (144) inches long with (hemmed) (steel capped hemmed) (aluminum capped hemmed) edges finished identical to main runners and cross tees.
    - 2. Shadow Line Moldings: Manufactured from 0.020 inch thick steel with 1/2 inch flange, 3/4 inch inside dimension, 3/8 inch by 3/8 inch recess and coated with factory-applied standard white baked-on enamel paint finish.

# PART 3 - EXECUTION

#### 3.01 Examination

Examine area receiving suspension system to identify conditions which will adversely affect installation. Do not begin installation until adverse conditions have been remedied.

### 3.02 Installation - NON-FIRE-RATED SYSTEM

A. Main Runners:

Installed (48) (60) inches on center, by direct suspension from existing structure, with not less than 12 gage hanger wires, wrapped tightly 3 full turns, spaced 48 inches on center along component length.

- B. Cross Tees:
  - 1. Installed perpendicular to main runners (20) (24) (30) (48) (60) inches on center to form \_\_\_\_\_ by \_\_\_\_ modules.
  - 2. Installed perpendicular to module forming cross tees (20) (24) (30) inches on center forming \_\_\_\_\_ by \_\_\_\_ modules.
  - 3. Installed adjacent to each unsupported side of recessed fixtures.
- C. (Angle) (Channel) (Shadow Line) moldings: Installed on vertical surfaces, intersecting main runners and cross tees, by appropriate method in accordance with industry-accepted practice.

### FIRE-RATED SYSTEM

- A. Suspension System Components: Installed in accordance with U.L. design number guidelines.
- 3.03 Repair
  - A. Remove damaged components, replace with undamaged components. Clean with nonsolvent based non-abrasive commercial cleaning solution.