Cleveland Clinic

Cleveland Clinic Standard Design Details – Fire Protection

The following pages contain standard details for the design and construction of new and renovated facilities at all domestic Cleveland Clinic locations. They shall be used by A/E firms in the preparation of drawings and specifications for construction of facilities.

The general purpose of each Detail is to provide the preferred method for installation of construction materials and equipment at Cleveland Clinic facilities regarding Codes and FM Global compliance, execution and uniformity.

These Details are to be used as a part of Fire Protection Bid and Construction documents. They are intended to be used to address system design aspects of equipment and materials that Cleveland Clinic desires to standardize among facilities, and identify prohibited materials and construction practices.

The use of these Details is mandatory for all design or maintenance projects. Deviations are discouraged. If project conditions arise which require a deviation, it shall be thoroughly documented by the user and submitted to Cleveland Clinic for review and approval using the Design Standards Revision Request form.

The Detail Drawings are in AutoCAD.

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Cleveland Clinic

STANDARD DESIGN DETAILS: FIRE PROTECTION & LIFE SAFETY

I. SPRINKLERS
   a. F-100 Typical Concealed Sprinkler Head Detail
   b. F-101 Typical Upright Sprinkler Head Detail
   c. F-102 Flexible Sprinkler Piping Detail

II. DRY SPRINKLER SYSTEM
   a. F-103 Dry System Test Connection

III. DUCT DETECTORS
   a. F-104 Typical Locations for Return and Supply Duct Detectors
   b. F-105 Typical Duct Detector for Damper Closure Location

IV. FIRE ALARM DEVICES
   a. F-106 Typical Mounting Heights of Fire Alarm Devices

** End of List **
Cleveland Clinic

DESIGN STANDARD REVISION REQUEST DOCUMENT

From:

Department or Firm:

Phone:

E-mail:

Date:

Standard Type:
Specification___ Design Guideline___ Detail___

Specification, Guideline, or Detail Number:

DESCRIPTION REASON FOR REVISION:

BRIEF DESCRIPTION OF REVISION:

SECTION, PAGE, PARAGRAPH NUMBER(S), DETAIL NUMBER:

HAS THIS PROPOSAL BEEN DISCUSSED WITH THE FACILITIES GROUP?

PROVIDE NAME OF PERSON AND DATE DISCUSSED:
1" DROP NIPPLE TYPICAL FOR ALL SPRINKLER HEADS.

SUSPENDED CEILING

CONCEALED SPRINKLER HEAD, STANDARD COVERAGE

FLAT SPRINKLER COVER PLATE

SPRINKLER BRANCH MAIN
FULLY BRAIDED, CORRUGATED STAINLESS STEEL HOSE WITH STAINLESS STEEL Braid, Minimum 1" I.D.

MULTIPORT BRACKET

SPRINKLER DROP

ADJUSTABLE HUB

1" NIPPLE

STANDARD RESPONSES CONCEALED SPRINKLER HEAD WITH FLAT COVER PLATE.

CEILING

**This detail illustrates installation methods preferred by the Cleveland Clinic Office of Facilities and is provided to the A/E as a basis for the development of contract documents. The A/E must determine suitability of this detail in whole or part and shall edit as required to coordinate with specific project requirements. Any deviations from the illustrated preferred method must be requested in writing by the proposer for review by the Cleveland Clinic Office of Facilities**

Cleveland Clinic
Office of Facilities
9500 Euclid Avenue
Cleveland, Ohio 44195
Tel: 216, Fax: 216
www.ccf.org

Title: FLEXIBLE SPRINKLER PIPING DETAIL

Date: 03/03/2011

Scale: NOT TO SCALE

Sketch: 102
**THIS DETAIL ILLUSTRATES INSTALLATION METHODS PREFERRED BY THE CLEVELAND CLINIC OFFICE OF FACILITIES AND IS PROVIDED TO THE A/E AS A BASIS FOR THE DEVELOPMENT OF CONTRACT DOCUMENTS. THE A/E MUST DETERMINE SUITABILITY OF THIS DETAIL IN WHOLE OR PART AND SHALL EDIT AS REQUIRED TO COORDINATE WITH SPECIFIC PROJECT REQUIREMENTS. ANY DEVIATIONS FROM THE ILLUSTRATED PREFERRED METHOD MUST BE REQUESTED IN WRITING BY THE PROPOSER FOR REVIEW BY THE CLEVELAND CLINIC OFFICE OF FACILITIES**

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**BRANCH LINE**
- Pitch back to riser

**TEST VALVE IN READILY ACCESSIBLE LOCATION**
- Plug for testing
- Remove and install temporary connection

**UNION**
- 45 Deg Ell
  - Smooth bore corrosion resistant outlet giving flow equivalent to one sprinkler

**DRAIN SHALL DISCHARGE OVER SPLASH BLOCK.**

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**Cleveland Clinic**
- Office of Facilities
- 9500 Euclid Avenue
- Cleveland, Ohio 44195
- Tel: 216___, Fax: 216___
- www.ccf.org/

**TITLE:**
- DRY SYSTEM TEST CONNECTION

**DATE:**
- 03/03/2011

**SCALE:**
- NOT TO SCALE

**DISCPLNE:**
- F

**SKETCH:**
- 103
NOTES:

1. WHERE A DUCT SMOKE DETECTOR IS INSTALLED IN AN INACCESSIBLE OR DIFFICULT TO REACH LOCATION, PROVIDE A REMOTE INDICATING RAMP AND A TEST SWITCH ON THE CEILING OR ADJACENT WALL.

2. COORDINATE EXACT QUANTITY AND LOCATIONS OF DUCT DETECTORS WITH MECHANICAL PLANS, NFPA 72, AND MECHANICAL CODE.

**THIS DETAIL ILLUSTRATES INSTALLATION METHODS PREFERRED BY THE CLEVELAND CLINIC OFFICE OF FACILITIES AND IS PROVIDED TO THE A/E AS A BASIS FOR THE DEVELOPMENT OF CONTRACT DOCUMENTS. THE A/E MUST DETERMINE SUITABILITY OF THIS DETAIL IN WHOLE OR PART AND SHALL EDIT AS REQUIRED TO COORDINATE WITH SPECIFIC PROJECT REQUIREMENTS. ANY DEVIATIONS FROM THE ILLUSTRATED PREFERRED METHOD MUST BE REQUESTED IN WRITING BY THE PROPOSER FOR REVIEW BY THE CLEVELAND CLINIC OFFICE OF FACILITIES**
COMBINATION SMOKE/FIRE DAMPER OR SMOKE DAMPER

DUCT SMOKE DETECTOR WITH AUXILIARY DRY CONTACT TO CLOSE DAMPER UPON ACTIVATION. LOCATE WITHIN 5 FEET OF DAMPER

TO FIRE ALARM CONTROL PANEL

NOTES:

1. WHERE A DUCT SMOKE DETECTOR IS INSTALLED IN AN INACCESSIBLE OR DIFFICULT TO REACH LOCATION, PROVIDE A REMOTE INDICATING RAMP AND A TEST SWITCH ON THE CEILING OR ADJACENT WALL.

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Office of Facilities
9500 Euclid Avenue / ___
Cleveland, Ohio 44195
tel:216___, fax:216___
www.ccf.org/_____

03/03/2011
NOT TO SCALE

105
NOTE:

1. INSTALLATION OF ALL FIRE ALARM DEVICES SHALL COMPLY WITH NFPA 72.

**THIS DETAIL ILLUSTRATES INSTALLATION METHODS PREFERRED BY THE CLEVELAND CLINIC OFFICE OF FACILITIES AND IS PROVIDED TO THE A/E AS A BASIS FOR THE DEVELOPMENT OF CONTRACT DOCUMENTS. THE A/E MUST DETERMINE SUITABILITY OF THIS DETAIL IN WHOLE OR PART AND SHALL EDIT AS REQUIRED TO COORDINATE WITH SPECIFIC PROJECT REQUIREMENTS. ANY DEVIATIONS FROM THE ILLUSTRATED PREFERRED METHOD MUST BE REQUESTED IN WRITING BY THE PROPOSER FOR REVIEW BY THE CLEVELAND CLINIC OFFICE OF FACILITIES**