



Designation: C 1321 – 98

# Standard Practice for Installation and Use of Interior Radiation Control Coating Systems (IRCCS) in Building Construction<sup>1</sup>

This standard is issued under the fixed designation C 1321; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

## 1. Scope

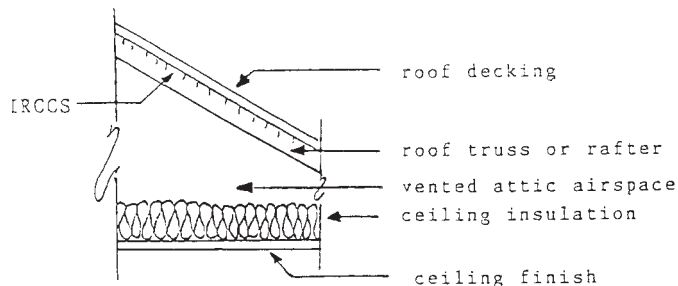
1.1 This practice has been prepared for use by the designer, specifier, and applicator of IRCCS (Interior Radiation Control Coating Systems) for use in building construction. The scope is limited to recommendations related to the use and installation of IRCCS, including a surface(s) normally having a far-infrared emittance of 0.25 or less that is sprayed or painted.<sup>2</sup> Some examples that this practice is intended to address include: (1) low emittance surfaces in vented building envelope cavities intended to retard radiant transfer across the vented airspace; (2) low emittance surfaces at interior building surfaces intended to retard radiant transfer to or from building inhabitants; and (3) low emittance surfaces at interior building surfaces intended to reduce radiant transfer to or from heating or cooling systems. See Fig. 1 and Fig. 2 for typical applications.

1.2 This practice covers the installation process from pre-installation inspection through post-installation. It does not cover the production of the Interior Radiation Control Coating Materials.

1.3 This practice is not intended to replace the manufacturer's installation instructions, but it shall be used in conjunction with such instructions. This practice is not intended to supersede local, state, or federal codes.

1.4 This practice assumes that the installer possesses a good working knowledge of the application codes and regulations, safety practices, tools, equipment, and methods necessary for the installation of Interior Coating Materials. It also assumes that the installer understands the fundamentals of building construction that affect the installation of an IRCCS.

1.5 When the installation or use of Interior Radiation Control Coating Materials, accessories, and systems may pose safety or health problems, the manufacturer shall provide the user appropriate current information regarding any known problems associated with the recommended use of the compa-

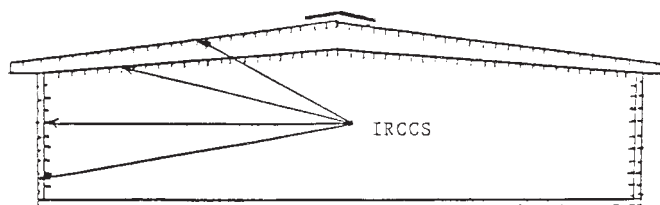


NOTE 1—Apply IRCCS to cover the exposed roof deck area. The low-emittance surface of the IRCCS must face the interior of the attic.

FIG. 1 Typical Residential Use

ny's products and shall also recommend protective measures to be employed in their safe utilization. The user shall establish appropriate safety and health practices and determine the applicability of regulatory requirements prior to use.

1.6 This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use. Specific precautionary statements are contained in Sections 5 and 7.



NOTE 1—Apply the IRCCS to cover the entire interior surface area. The low-emittance surface of the IRCCS must face the interior of the bldg.

FIG. 2 Typical Industrial, Commercial, and Agricultural Use

## 2. Referenced Documents

### 2.1 ASTM Standards:

C 168 Terminology Relating to Thermal Insulating Materials<sup>3</sup>

<sup>1</sup> This practice is under the jurisdiction of ASTM Committee C-16 on Thermal Insulation and is the direct responsibility of Subcommittee C16.21 on Reflective Insulation.

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<sup>2</sup> The as-manufactured emittance of Interior Radiation Control Coating product, as determined on a typical substrate, should be stated on the label (see 7.2.1).

<sup>3</sup> Annual Book of ASTM Standards, Vol 04.06.