



PROCESS
INDUSTRY
PRACTICES

REAFFIRMATION
January 2024

Refractory

PIP RFTF1000
Ceramic Fiber Refractory Installation
Qualification, Inspection, and Testing

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PURPOSE AND USE OF PROCESS INDUSTRY PRACTICES

This Practice has been prepared by harmonizing technical requirements from existing standards of major industrial operators, contractors, and standards development organizations. While this Practice is intended to incorporate the majority of requirements, individual applications may have requirements which take precedence over this Practice. Determinations concerning fitness for purpose or application of this Practice to specific project or engineering situations should not be made solely on information contained in this Practice. All Practices are intended to be consistent with applicable laws and regulations. Should this Practice conflict with applicable laws or regulations, such laws or regulations must be followed. Consult an appropriate professional before applying or acting on any material contained in or suggested by this Practice.

Use of trade names should not be viewed as an expression of preference. Other brands having the same specifications are equally correct and may be substituted for those named.

This Practice is subject to revision at any time. For more information refer to PIP ADG001, *Specification for Developing Practices*.

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PIP RFTF1000 Ceramic Fiber Refractory Installation Qualification, Inspection, and Testing

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Data Form

**RFTF1000-F – Inspection Hold Point
and Sign-Off Schedule**

1. Scope

This Practice provides requirements for quality control and quality assurance for the installation of ceramic fiber refractory. Inspection methods include documentation review, in-progress installation inspection, and final inspection of the completed lining.

2. References

Applicable parts of the following Practices and industry codes and standards shall be considered an integral part of this Practice. The edition in effect on the date of contract award shall be used, except as otherwise noted. Short titles are used herein where appropriate.

2.1 Process Industry Practices (PIP)

- PIP RFIA1000 - *Refractory Anchor and Accessory Installation Details*
- PIP RFSA1000 - *Refractory Anchor and Accessory Specification*
- PIP RFSF1000 - *Ceramic Fiber Refractory Material Specification*
- PIP RFSF2000 - *Ceramic Fiber Refractory Installation Specification*
- PIP RFTA1000 - *Refractory Anchor and Accessory Installation Qualification, Inspection, and Testing*

2.2 Industry Codes and Standards

- ASTM International (ASTM)
 - ASTM C71 - *Standard Terminology Relating to Refractories*

3. Definitions

With the exception of the terms defined in this section, terms used in this Practice are defined in accordance with *ASTM C71*. If a definition as used in this Practice differs from the one listed in the referenced documents, the modified definition is included in the following listing.

compliance data sheet: Data sheet provided by the ceramic fiber manufacturer listing physical and chemical property values that the manufacturer certifies or guarantees will be met by each sample tested using the specified procedures in Table A-1 of *PIP RFSF1000*. See *PIP RFSF1000*, Appendix A, for further compliance data sheet requirements.

hold point: A mandatory verification point beyond which work cannot proceed without approval and release by the designated authority.

installer: Party responsible for installing the ceramic fiber refractory lining. This includes each individual ceramic fiber installer, who is prequalified before being allowed to install the ceramic fiber refractory lining.

installer's inspector: Installer's authorized representative, responsible for the quality control of all materials, installations, and workmanship provided by the installer, and any of the installer's subcontractors or vendors