



**BODY OF KNOWLEDGE FOR
API 936 REFRACTORY PERSONNEL
CERTIFICATION EXAM**

Effective April 2025, August 2025, December 2025,
April 2026, August 2026, December 2026

(Replaces April 2024)

API certified 936 refractory personnel must have knowledge of installation, inspection, testing and repair of refractory linings. The API 936 Refractory Personnel Certification Examination is designed to identify applicants possessing the required knowledge.

The exam consists of 75 scored questions and 10 pretest questions; and runs for 3 hours and 15 minutes; no references are available during the exam, and nothing may be brought into the test center.

The exam focuses on the content of API 936 and other referenced publications.

The following body of knowledge will identify references where specific knowledge may be found, but these references are not exclusive to all others.

REFERENCE PUBLICATIONS:

A. API Publications:

- **API Standard 936**, *Refractory Installation Quality Control Guidelines – Inspection and Testing Monolithic Refractory Linings and Materials*, **5th Edition, March 2024**
- **API Standard 975**, *Refractory Installation Quality Control – Inspection and Testing of Refractory Brick Systems and Materials*, **1st Edition, November 2021**
- **API Standard 976**, *Refractory Installation Quality Control – Inspection and Testing of AES/RCF Fiber Linings and Materials*, **1st Edition, March 2018**

B. ASTM (American Society for Testing and Materials) Publications:

- [C113-14 \(2019\)](#) – Standard Test Method for Reheat Change of Refractory Brick
- [C133-97 \(2021\)](#) – Standard Test Methods for Cold Crushing Strength and Modulus of Rupture of Refractories
- [C181-11 \(2018\)](#) – Standard Test Method for Workability Index of Fireclay and High-Alumina Plastic Refractories
- [C704-15](#) -Standard Test Method for Abrasion Resistance of Refractory Materials at Room Temperatures

Unless otherwise noted, the whole document is subject to testing.

Note: Refer to the Publications Effectivity Sheet on the ICP Website (www.api.org/ICP) for a list of specific editions, addenda, and supplements of the reference publications that are effective for your exam date.

Candidates are expected to demonstrate knowledge in the following categories:

Roles and Responsibilities

Candidates are expected to understand the different roles (ex. owner, inspector, contractor, manufacturer.) related to refractory and their responsibilities (*API 936, Section 5, Section 6*).

Laboratory Testing Procedures

Candidates are expected to understand Laboratory Testing Procedures (*API 936, Section 8*) including test method selection and execution as well as the interpretation, acceptance levels for each test, and documentation of test results.

Materials and Installation Requirements

Candidates are expected to be able to identify different types of refractories, including packaging and storage. They are also required to identify different installation techniques and related equipment.

Installation techniques that should be understood include gunning (*API 936, Section 9.6*), casting (*API 936, Section 9.7*), and ramming/hand packing (*API 936 Section 9.8*).

Candidates should also be familiar with how to read and interpret refractory lining design requirements including anchors, sampling, water or activator additions, or fiber addition.

Related to anchors (*API 936, Section 7.4*), candidates should be familiar with materials, patterns, layouts and welding, and quality control elements (*API 936 Section 9.4*)

Candidates should also be knowledgeable about frequency and methods of production sampling include gunning, casting, hand packing, (*API 936, Section 8.4*)

Candidates are also responsible for understanding water or activator additions including mixing procedures and other quality control elements (*API 936 Section 9*).

Related to fiber additions, candidates should understand percentages, materials and mixing (*API 936 Section 9.10*).

Installation Inspection and Quality Control

Candidates are expected to understand how to read and interpret refractory material specification and installation requirements. This includes inspection and data collection procedures, acceptance and rejection criteria and applicable test panel/mockup requirements (*API 936 Section 8.2 and 8.3*).

Candidates are also expected to demonstrate knowledge related to monitoring quality of installation, including visual, NDE methods, and other various inspection techniques. Candidates should also understand repair procedures and the resolution of defects (*API 936, Section 9.14*).

Candidates are also responsible for understanding curing (*API 936, Section 9.13*) and dry out requirements (*API 936, Section 10*).