BUILDINGS BULLETIN 2011-025

OTCR

Supersedes: Buildings Bulletin 2010-017 dated June 15, 2010

Issuer: Alan Price, P.E.
Director, Office of Technical Certification and Research

Issuance Date: December 23, 2011

Purpose: This document sets forth procedures and requirements for interim acceptance of field erected boilers used in buildings constructed under the 1968 Building Code or prior codes until May 31, 2013.

Related Code Section(s):

- BC 1704.23
- AC 28-101.4
- RS 14-2
- MC 1004.1
- AC 28-113.1
- RS 14-6
- FGC 631.1

Subject(s): Oil- and Gas-Fired Boilers, Field Erected Boilers; Boiler, field erected; Boiler, factory-built; Boiler, repair; Boiler, replacement

I. Factory-built boilers.

Pursuant to section AC 28-101.4.3, Item (1), equipment shall comply with the 2008 New York City Construction Codes when construction document applications are submitted on or after July 1, 2009. In relation to boilers, sections FGC 631 and MC 1004 both require gas- and oil-fired boilers to be listed to code-prescribed standards including UL 726\(^1\) and UL 795\(^2\), respectively. Such standards require the boiler to be tested and listed as factory-built units. For new buildings constructed pursuant to the 2008 NYC Construction Codes, only factory-built boilers shall be installed in accordance with their code-prescribed listing.

II. Field erected boilers.

In existing buildings that are constructed under the 1968 Building Code or prior codes, when only a burner or vessel is to be replaced or where the entire boiler is to be replaced but the location of the boiler, the configuration of the space in which it is to be located makes the installation of a factory-built boiler impracticable, the Department may accept field erected boilers that are in compliance with the conditions of this bulletin. Effective immediately the following interim procedures and requirements will be accepted by the Department of Buildings ("DOB") for the use of field erected boilers for which a permit has been issued prior to June 1, 2013:

A. Compliance. Field erected boilers that are in compliance with A1 or A2 below are considered acceptable:

1. **1968 Building Code** – Field erected boilers shall comply with the required reference standards of the 1968 Building Code, including RS 14-2 and RS 14-6, which requires compliance with UL 726\(^1\) and UL 795\(^2\), whichever is applicable, as verified by:
   a. Testing by an approved agency and evaluation of test data performed by the Office of Technical Certification and Research ("OTCR"). The report issued by the laboratory shall indicate acceptable model and size ranges based on the testing performed. OTCR shall issue an approval report upon satisfactory evaluation, or

*SEE RELATED BUILDINGS BULLETIN 2014-023*
b. Previously issued Material and Equipment Acceptance ("MEA") Reports. Field erected boilers shall have previously issued valid MEA reports certifying compliance with the required reference standards of the 1968 Building Code.

2. **Site-specific Approval**— Applicants may apply for site-specific approval of field erected boiler assemblies by submitting an OTCR2 and OTCR3 application to OTCR. The applicant must submit testing reports from an approved agency or an NYC Legacy testing laboratory for OTCR evaluation.

**B. Design and Construction.** Field erected boilers shall be designed and constructed in accordance with the requirements of ASME CSD-1\(^3\) and all applicable sections of the ASME Boiler and Pressure Vessel Code\(^4\). Field erected boilers shall be installed by a NYC licensed oil burner installer or NYC licensed Master Plumber. The pressure vessel shall be field-fabricated by the vessel manufacturer.

**C. Repair and Replacement.** At the time of permit, a letter of compatibility listing compatible burners for use with a model of field erected boiler must be submitted with the required construction documents. Burners used for replacement shall be in accordance with the letter of compatibility.

**D. NYC Energy Conservation Code.** Field erected boilers shall comply with the New York City Energy Conservation Code.

**E. NYC Department of Environmental Protection.**

1. Compliance – Field-erected boilers shall be listed by NYC Department of Environmental Protection (DEP), Bureau of Environmental Compliance (BEC). The installed boilers shall comply with minimum requirements specified in the Engineering Criteria for Fuel Oil Burning Equipment.

2. Filing – A Professional Engineer or a Registered Architect shall submit an application, on the forms prescribed by BEC, for DEP Work Permit or Registration before installation of the boiler(s/burner(s)).

**F. Compliance after May 31, 2013.** The Department will work with the industry to develop requirements for listing and labeling of field erected boilers and for compliance with all applicable New York City laws and agency rules.

**Referenced Standards**

1. UL 726 – 98 "Oil-Fired Boiler Assemblies"
2. UL 795 – 99 "Commercial-Industrial Gas Heating Equipment"
3. ASME CSD-1 – 1998 "Controls and Safety Devices for Automatically Fired Boilers with the ASME CSD-1a-1999 Addendum"
4. ASME BPVC – 2004 "ASME Boiler & Pressure Vessel Code"