BSR/ASHRAE Addendum j to ANSI/ASHRAE Standard 154-2016

Public Review Draft

Proposed Addendum j to Standard 154-2016, Ventilation for Commercial Cooking Operations

First Public Review (July 2020)
(Draft shows Proposed Changes to Current Standard)

This draft has been recommended for public review by the responsible project committee. To submit a comment on this proposed standard, go to the ASHRAE website at www.ashrae.org/standards-research--technology/public-review-drafts and access the online comment database. The draft is subject to modification until it is approved for publication by the Board of Directors and ANSI. Until this time, the current edition of the standard (as modified by any published addenda on the ASHRAE website) remains in effect. The current edition of any standard may be purchased from the ASHRAE Online Store at www.ashrae.org/bookstore or by calling 404-636-8400 or 1-800-727-4723 (for orders in the U.S. or Canada).

This standard is under continuous maintenance. To propose a change to the current standard, use the change submittal form available on the ASHRAE website, www.ashrae.org.

The appearance of any technical data or editorial material in this public review document does not constitute endorsement, warranty, or guaranty by ASHARE of any product, service, process, procedure, or design, and ASHRAE expressly disclaims such.

©2020 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: standards.section@ashrae.org.

ASHRAE, 1791 Tullie Circle, NE, Atlanta GA  30329-2305
(This foreword is not part of this standard. It is merely informative and does not contain requirements necessary for conformance to the standard. It has not been processed according to the ANSI requirements for a standard and may contain material that has not been subject to public review or a consensus process. Unresolved objectors on informative material are not offered the right to appeal at ASHRAE or ANSI.)

FOREWORD

Grease ducts for kitchen exhaust must be liquid-tight per building codes (IMC, NFPA 96, UMC) and must be tested to meet this requirement. It is the position of this committee and IKECA that the Water Test should be the method of execution to be conclusive as experience shows the alternate Light Test was not as effective to determine leak locations and carries high level of uncertainty.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and strikethrough (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]

5. EXHAUST SYSTEMS

5.1 Duct Systems...

...

5.2 Duct Leakage Testing

5.2.1 Prior to the use or concealment of any portion of a grease duct system, a leakage test shall be performed to determine that all welded joints and seams are liquid tight. The leakage test shall consist of a light test, water pressure test, or an approved equivalent test. Ducts shall be considered to be concealed where installed in shafts or covered by coating or wraps that prevent the ductwork from being visually inspected on all sides. The permit holder shall be responsible to provide for providing the necessary equipment and for performing the test perform the grease duct leakage test. A water spray test shall be performed to determine that all welded joints are liquid tight.

5.2.1.1 Light Test. The light test shall be performed by passing a lamp having a power rating of not less than 100 W through the entire section of ductwork to be tested. The lamp shall be open so as to emit light equally in all directions perpendicular to the duct walls. No light from the duct interior shall be visible through any exterior surface.

5.2.1.2 Water Test. The water test shall be performed by use of a pressure washer operating at a minimum of 1500 psi (10.34 kPa), simulating cleaning operations. The water shall be applied directly to all areas to be tested. No water applied to the duct interior shall be visible on any exterior surface in any volume during the test. A water test shall be performed by simulating a grease duct cleaning operation by use of a pressure washer that is designed for grease duct cleaning and that operates at a pressure of not less than 1200 psi. The water shall be applied directly to all areas to be tested. Water applied to the duct interior surfaces shall not be visible on any exterior surfaces of the duct during the test.