

PROPOSED PMG LISTING CRITERIA FOR

EXHAUST TYPE II HOOD WITH AN INTEGRATED FIRE SUPPRESSION SYSTEM FOR DOMESTIC COOKING APPLIANCES IN COMMERCIAL APPLICATIONS

LC1031

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PREFACE

Plumbing, mechanical and fuel gas (PMG) listings issued by ICC Evaluation Service, LLC (ICC-ES), are based upon performance features of the *International Plumbing Code*®, *International Mechanical Code*®, *International Residential Code*®, *Uniform Plumbing Code* and *Uniform Mechanical Code*. Section 105.2 of the *International Plumbing Code*® reads as follows:

Materials, methods and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material or method of construction shall be approved where the code official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.

Similar provisions are contained in the Uniform Codes.

ICC-ES may consider alternate listing criteria, provided the listing applicant submits valid data demonstrating that the alternate listing criteria are at least equivalent to the listing criteria set forth in this document, and otherwise demonstrate compliance with the performance features of the codes. Notwithstanding that a product, material, or type or method of construction meets the requirements of the criteria set forth in this document, or that it can be demonstrated that valid alternate criteria are equivalent to the criteria in this document and otherwise demonstrate compliance with the performance features of the codes, ICC-ES retains the right to refuse to issue or renew a listing, if the product, material, or type or method of construction is such that either unusual care with its installation or use must be exercised for satisfactory performance, or if malfunctioning is apt to cause unreasonable property damage or personal injury or sickness relative to the benefits to be achieved by the use of the product, material, or type or method of construction.

Listing criteria are developed solely for use by ICC-ES for purposes of issuing ICC-ES PMG listings.

1.0 INTRODUCTION

1.1 Purpose: The purpose of this listing criteria is to establish requirements for an exhaust Type II hood with an integrated fire suppression system for domestic cooking appliances in a commercial applications, to be recognized in an ICC Evaluation Service, Inc. (ICC-ES), listing.

1.2 Scope: This listing criteria applies to factory-built, pre-engineered exhaust hoods with an integrated fire suppression system to be used over domestic cooking appliances in commercial applications such as but not limited to child care facilities, office lunch rooms teaching labs, EMS facilities, student and military housing and managed care environments, as noted in Section 507.2.3 of the *International Mechanical Code*. This product is not to be used as a substitute where a Type I hood is required.

1.3 Codes and Referenced Standards:

Note: Any standard referenced herein shall be the current edition of that standard. In instances where the applicable code references a different edition of a given standard, the applicant shall also provide documentation of conformance with the code referenced standard edition.

1.3.1 2012 *International Mechanical Code*[®] (IMC), Chapter 5, Exhaust Systems. International Code Council.

1.3.2 2012 *International Building Code*[®] (IBC), Chapter 9, Fire Protection Systems. International Code Council.

1.3.3 2012 *International Fire Code*[®] (IFC), Chapter 6, Building Services and Systems, and Chapter 9, Fire Protection Systems. International Code Council.

1.3.4 UL Subject 300A, Extinguishing System Units for Residential Range Top Cooking Surfaces, Issue Number 3, Underwriters Laboratories Inc.

1.3.5 UL 507, Standard for Electric Fans, 9th edition, Underwriters Laboratories Inc.

1.4 DEFINITIONS

See UL Subject 300A and UL 507.

2.0 BASIC INFORMATION

2.1 Product Description: Complete information shall be submitted concerning material specifications, thickness, size and the manufacturing process.

2.2 Installation Instructions: Unit shall be installed in accordance with the manufacturer's instructions and the requirements of the applicable codes and reference standards in Section 1.3.

2.3 Product and Packaging Identification: The unit and the package shall be permanently and legibly marked with the manufacturer's name or trademark and the model number. The product shall also bear the PMG[®] listing mark. The ICC-ES listing number shall be placed on the listed product's packaging or installation instructions.

3.0 GENERAL REQUIREMENTS

3.1 The following data shall be submitted:

3.2 Test reports showing conformance of the units with UL Subject 300A.

3.3 Test reports showing conformance with Sections 32-35, 37, 40-42, 44, 46-47, and 92.1A of UL 507.

4.0 TEST METHOD AND PERFORMANCE REQUIREMENTS

4.1 Documentation of the following design items shall be provided:

4.1.1 Actuation of the fire suppression system results in a shutdown of the fuel or electric power supply to the cooking elements as required by Section 904.11.2 of the IBC.

4.1.2 When carbon dioxide is used in the automatic fire suppression system, all requirements of Section 904.11.3 of the IBC shall be satisfied.

5.0 LISTING RECOGNITION

5.1 The evaluation report shall state the manufacturer's name and the product name for the equipment qualified for use with each exhaust Type II hood with an integrated fire suppression system, or general limits where recognition is based on manufacturer's listing.

5.2 The evaluation report must require an automatic activation for fire suppression system, if provided the manual activation device shall be in accordance with Section 904.11.1 of the IBC.

5.3 The evaluation report shall state that unit is not to be used over cooking appliances which are used for commercial purposes when the appliance is primarily used for the preparation of food for compensation, trade or services rendered.

5.4 The evaluation report shall state that the end user shall provide evidence of the frequency, duration and nature of cooking operations to the code official before determining whether a Type I or II hood must be installed over a domestic cooking appliance.