

August 27, 2013

1

UL 1381

Outline of Investigation for Aerosol Duct Sealant

ISSUE NO: 1

August 27, 2013

*Summary of Topics*

*This is a reissue of the first edition. The aerosol duct sealants covered by these requirements are intended to seal minor holes and gaps in sheet metal air ducts. These requirements cover characteristics of the duct sealant including: surface burning, mold growth and humidity, erosion, interior duct burning, leakage reduction and durability.*

COPYRIGHT © 2013 UNDERWRITERS LABORATORIES INC.

No Text on This Page

## CONTENTS

### INTRODUCTION

1 Scope .....	4
2 Glossary .....	4
3 Units of Measurement .....	5
4 Undated References .....	5

### CONSTRUCTION

5 General .....	5
-----------------	---

### PERFORMANCE

6 Test for Surface Burning Characteristics .....	5
7 Mold Growth and Humidity Test .....	6
8 Erosion Test .....	6
8.1 General .....	6
8.2 Test installation .....	6
8.3 Test method .....	8
9 Burning Test .....	8
10 Leakage Reduction Test .....	11
11 Durability Test .....	12

### MARKING

12 General .....	12
------------------	----

### INSTRUCTIONS

13 Installation Instructions .....	13
------------------------------------	----

## INTRODUCTION

### 1 Scope

1.1 These requirements apply to aerosol duct sealants for use with sheet metal air ducts that are fabricated and installed in accordance with ANSI/SMACNA HVAC Duct Construction Standards – Metal and Flexible.

1.2 These requirements do not apply to aerosol duct sealants for use with factory made air ducts listed and labeled in accordance with UL 181, (including rigid fiberglass ducts, flexible wire helix ducts, or spirally wound metal ducts not conforming to SMACNA requirements).

1.3 These requirements do not apply to spray sealants intended to be used as a substitute for or to supplement mechanical attachment.

1.4 Aerosol duct sealants are used for the purpose of additional sealing of seams and joints of sheet metal air duct systems. These requirements are limited to application in ducts with individual openings no greater than 5/8 in. diameter, and seam / joint openings no greater than 5/8 in. across.

1.5 These requirements are intended to address performance characteristics of the sprayed sealant relative to not adversely affecting the sheet metal ducts to which they are applied.

1.6 These requirements are not intended to address or rate the sealing efficacy of the duct sprayed sealant.

1.7 Aerosol duct sealants are to be applied by trained professionals and specifically in accordance with accompanying installation instructions.

1.8 These requirements do not address the human health effects of the aerosol duct sealant.

### 2 Glossary

2.1 For the purposes of this outline the following definitions apply.

2.2 CONTINUED EROSION – Identified to be either a constant or increasing rate of erosion.