

## NEW UL TEST STANDARDS

The effective date for the implementation of new UL Test Standards for Dynamic Fire Dampers, Smoke Dampers and Combination Fire/Smoke Dampers is July 1, 2002. The revised standards are:

- UL 555 6<sup>th</sup> Edition 1999 (Fire Dampers)
- UL 555S 4<sup>th</sup> Edition 1999 (Smoke Dampers)

These new test standards mandate significantly more stringent testing in order for the damper to qualify to obtain the UL label as approved or qualified for a specific application. The new standards require that dampers be tested and rated for closure at:

- 2000, 3000 or 4000 FPM air velocities
- 4", 6" or 8" w.g. operating static pressure
- Elevated temperatures of either 250°F or 350°F

A comparison summary of the new test standards with the old is attached for your information.

The result of the implementation of these new test standards can result in potential problems for specifiers and contractors. SPECIFICALLY:

1. Dampers tested to the old standards will not be available after July 1.
2. Certain large dampers may not be available and may have to be replaced with multiple smaller dampers or dampers with multiple operators. This is especially the case with large CURTAIN DAMPERS.

Contractors and specifiers with projects in progress which may not be completely shipped and/or installed as of July 1 should review submittal data with damper manufacturers to determine what, if any, impact the new damper requirements may have on specific project installations.

Contractors with projects bid but not yet started should review their bid package/contract to determine if any changes to the scope of work is indicated.

NOTE: Any changes in the availability of Damper Sizes and/or installation requirements is MANUFACTURER SPECIFIC. The impact of these damper changes will vary by DAMPER MANUFACTURER. Answers to specific questions regarding availability and installation issues should be discussed with DAMPER MANUFACTURERS.

**Old UL 555 Test Standards for  
Fire Dampers  
(5th Edition)**

**New UL Test 555 Standards for  
Fire Dampers  
(6th Edition, effective July 2002)**

**DYNAMIC CLOSURE TEST**

• Tested with ambient temperature air utilizing a manual release	• Temperature sensor must release to close damper
• No <del>minimum</del> airflow requirement • No safety factor built into ratings	• Airflow Ratings: 2,000, 3,000, and 4,000 fpm Minimum test requirements: 2,400, 3,400, and 4,400 fpm
• No minimum pressure requirement	• Pressure ratings: 4 in., 6 in., and 8 in. wg Minimum test requirements: 4.5 in., 6.5 in., and 8.5 in. wg
• Unidirectional ratings	• Bidirectional testing required

**Old UL 555S Test Standards for  
Smoke Dampers  
(3rd Edition)**

**New UL 555S Test Standards for  
Smoke Dampers  
(4th Edition, effective July 2002)**

**CYCLING TEST**

• Two position actuators - 5,000 cycles	• Two position actuators - 20,000 cycles
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**OPERATION TEST**

• Tested with ambient temperature air	• Tested at rated temperature for 15 minutes prior to test
• No minimum airflow requirement • No safety factor built into ratings	• Airflow Ratings: 2,000, 3,000, and 4,000 fpm Minimum test requirements: 2,400, 3,400, and 4,400 fpm
• No minimum pressure requirement	• Pressure ratings: 4 in., 6 in., and 8 in. wg Minimum test requirements: 4.5 in., 6.5 in., and 8.5 in. wg
• Unidirectional ratings	• Bidirectional testing required
• Actuators may be field mounted	• All actuators must be factory installed (effective June 2000)

**LEAKAGE TEST**

• Tested with ambient temperature air	• Tested with air at rated temperature
• Tested with a unit that has not been exposed to the Operation and/or Dynamic Closure Test	• Tested after Operation Test and/or Dynamic Closure Test
• Four leakage classifications	• 4th Leakage classification eliminated
• Unidirectional ratings	• Bidirectional testing required
• No actuation required	• Test with actuator holding damper closed