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REPORT DATE: AUGUST 22, 2000

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CLIENT: AMERICAN METAL PRODUCTS INC.

MODEL: DIRECT VENT GAS APPLIANCE VENT TERMINALS

#### **TEST REPORT NO. J20017830-231**

EVALUATION
OF
MODELS 4DHC, 5DHC, 4DVC, 5DVC, 4DWT AND 5DWT
DIRECT VENT APPLIANCE VENTING COMPONENTS

FOR AMERICAN METAL PRODUCTS 8601 HACKS CROSS ROAD OLIVE BRANCH, MI 38654

BY
INTERTEK TESTING SERVICES NA INC
8431 MURPHY DRIVE
MIDDLETON, WISCONSIN 53562

#### **INTRODUCTION**

Intertek Testing Services NA Inc. (ITS) of Middleton, Wisconsin, examined and tested the above stated direct vent appliance venting components manufactured and furnished by American Metal Products of Olive Branch, Michigan. The tests were conducted on May 23-25, 2000 for compliance with applicable sections of ANSI Z21.88-1999•CSA 2.33-M99 "Standard for Vented Gas Fireplace Heaters." The vent components were tested in conjunction with Jotul North America models QF 100 QT Nordic, GF600 Firelight, and GI 450 Katahdin direct vent gas fireplace heaters. The results in this report are limited to the items submitted. The test data is on file at ITS, Middleton, Wisconsin.

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#### **PRODUCT DESCRIPTION**

The models stated below are venting components for gas-fired direct vent appliances. They are concentric (coaxial) pipes for separating the inlet and exhaust gases. A complete description of the components including proprietary drawings is on file at ITS, Middleton, Wisconsin.

Description	Part Number	Materials	Diameter Dimensions (in)
Vertical termination	4DVC	Stainless steel/galvanized steel	4 by 6-5/8
Vertical termination	5DVC	Stainless steel/galvanized steel	5 by 8
Horizontal termination	4DHC	Stainless steel/galvanized steel	4 by 6-5/8
Horizontal termination	5DHC	Stainless steel/galvanized steel	5 by 8
Wall Thimble	4DWT	Stainless steel/galvanized steel	4 by 6-5/8
Wall Thimble	5DWT	Stainless steel/galvanized steel	5 by 8

### **CONSTRUCTION REVIEW**

ANSI Z21.88-1999•CSA 2.33-M99

SECTION	SUBJECT/REQUIREMENT	RESULTS
1.1	Scope	Informational
1.2	General Construction	Complies
1.3	Accessibility	Complies
1.4	Thickness of Materials	Complies
1.5	Evaluation of Comb./Venting Side Sealing Materials	Complies
1.6 - 1.23	Appliance Specific Sections	Not applicable
1.24	Direct Vent/Air Intake Pipes	Complies
1.25 - 1.35	Appliance Specific Sections	Not applicable

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#### **PERFORMANCE**

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ANSI Z21.88-1999 • CSA 2.33-M99

SECTION	SUBJECT/REQUIREMENT	RESULTS
2.1 - 2.3	General, Appliance Specific	Informational
2.4	Combustion	Complies
2.5	Appliance and Burner Durability Test	Not applicable
2.6	Burner Operating Characteristics	Complies
2.7	Loose Materials	Not applicable
2.8	Pilot Operating Characteristics	Complies
2.9 - 2.11	Appliance Specific Sections	Not applicable
2.12	Delayed Ignition & Integrity Tests for Direct Vent App.	Complies (1)
2.13 - 2.20	Appliance Specific Sections	Not applicable
2.21	Wall, Floor and Ceiling Temperatures	Complies (1)
2.22 - 28	Appliance Specific Sections	Not applicable
2.29	Wind Tests	Complies
2.30	Vent & Vent/Air Intake Terminal Assembly	Complies
2.31 - 2.36	Appliance Specific Sections	Not applicable

#### **EXPLANATORY NOTES**

1. Deemed in compliance based on tests previously conducted by ITS/Warnock Hersey.

#### **TEST EQUIPMENT**

Test equipment used to measure and record data was as follows. Calibration records are on file at ITS - Middleton, Wisconsin.

- 1. Rochester model 3001 temperature indicator
- 2. Fluke model 52 K/J thermometer
- 3. Equimeter model S-275 dry gas meter
- 4. TSI model 8345 wind velocity meter
- 5. California Instruments model 300 NDIR carbon monoxide analyzer
- 6. California Instruments model 300 NDIR carbon dioxide analyzer

#### **CLEARANCES TO COMBUSTIBLES**

Per Explanatory Note 1 above, the wall thimble and vent terminals were found acceptable for zero-clearance to combustibles when installed per the manufacturer's instructions.

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#### **CONCLUSIONS**

Based on tests conducted with Jotul North America models QF 100 QT Nordic, GF600 Firelight, and GI 450 Katahdin direct vent gas fireplace heaters, the American Metal Product models 4DHC, 5DHC, 4DVC, 5DVC, 4DWT and 5DWT appliance vent components are deemed in compliance with ANSI Z21.88-1999•CSA 2.33-M99 when used in conjunction with all ITS/WHI listed Jotul North America direct vent gas fireplace heater models. The vent components are to be constructed and installed in accordance with ITS approved documentation. This report does not automatically imply certification. Products must bear a WHI label in order to demonstrate certification.

Tested by:

William Keen

Engineering Technician

Reviewed and reported by:

Edwin Hodgson Project Manager