

**State of Oregon
Building Codes Division
Interpretive Ruling No. 96-18
USE OF DEMA ENGINEERING AIR GAP EDUCTOR**

Requested By: ROBERT HAUL
SENIOR DIRECTOR OF ENGINEERING
DEMA ENGINEERING COMPANY
10020 BIG BEND BOULEVARD
P.O. BOX 26664
ST. LOUIS, MISSOURI 63122

QUESTION

Should the following list of Dema Engineering air gap eductor fittings be permitted as an alternate material and method of installation for backflow protection?

Product Name	Model Number
Dema	163AG
Dema	164AG

BACKGROUND

The Division received a request for approval of the air gap eductor unit in November from Dema Engineering Company representative Robert Haul. The Plumbing Board has reviewed similar products for chemical dispensing equipment at previous meetings. Air gap devices have been found to be an effective method of backflow protection.

FINDINGS

Current Plumbing Code provisions specify an air gap for backflow protection to be 1 inch minimum. The air gap in this product exceeds 1.0 inch. Plastic products used in conjunction with potable water piping distribution are required to be nontoxic. The International Association of Plumbing and Mechanical Officials (IAPMO) listing of this product requires it to be constructed of nontoxic materials.

Testing results provided by the manufacturer show the proposed design is satisfactory and complies with the intent of the code and the material offered is for the purpose intended, in quality, strength, effectiveness, durability and safety to that prescribed in the 1996 Oregon State Plumbing Specialty Code (OSPSC).

DISCUSSION AND CONCLUSIONS

Authority. ORS 455.060 authorizes the Division to issue binding interpretive rulings on the building codes and on acceptability of materials, design or method of construction. Advice received from the Attorney General in OP #5208, October 1, 1981.

Code or factual issues to be resolved. Due to the above technical and scientific facts, the Plumbing Board finds the materials and construction of the Dema Engineering Company air gap eductor devices listed in this ruling, installed in accordance with the 1996 OSPSC are equivalent in quality, strength, effectiveness, durability and safety as other air gap protection methods addressed in the code.

ANALYSIS

These devices have been tested by the Terralab Engineers testing facility and listed by IAPMO as meeting the requirements of the IGC-46-92 manufacturing and performance standard. This standard is the appropriate standard for consideration of these products.

CONCLUSION

When installed properly and within the limitations of this ruling, the use of the Dema air gap eductor fittings listed is equivalent to current code approved products.

(signed December 20, 1996)
Arthur G. Atchison
Chairman, Plumbing Board

Date

The recommendations and findings of the Board are accepted and the Interpretation is adopted effective immediately.

(signed January 10, 1997)
Joseph A. Brewer III, Administrator
Building Codes Division

Date