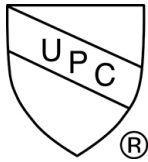


IAPMO RESEARCH AND TESTING, INC.

5001 E. Philadelphia Street, Ontario, CA 91761 • Phone (909) 472-4100 • Fax (909) 472-4244 • www.iapmort.org



CERTIFICATE OF LISTING



IAPMO Research and Testing, Inc. is a product certification body in which its product certification system includes inspection and testing of samples taken from the supplier's stock or from the market or a combination of both to verify compliance to the requirements of applicable codes and standards. This activity is coupled with periodic surveillance of the supplier's factory and/or warehouses as well as the assessment of the supplier's Quality Assurance System. This listing is subject to the conditions set forth in the characteristics below and is not to be construed as any recommendation, assurance or guarantee by IAPMO Research and Testing, Inc. of the product acceptance by Authorities Having Jurisdiction.

Issued To:

NUNGWON METAL IND. CO. LTD. (NWM)

366, GEURUGOGAE-RO EUNHYEON-MYEON YANGJU-SI, GD KS001, KYONGGI-DO, Korea, Republic of

Product:

Copper Water Tube

Products are in compliance with the following code(s):
Uniform Plumbing Code (UPC®)

Products are in compliance with the following standard(s)
ASTM B88-2020

File Number: 5991

Effective Date: May 2019

Void After: May 2024*


Chairman, Product Certification Committee



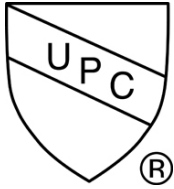

Chief Technical Service Officer

*This certificate is not evidence of current listing. To verify listing status, visit the IAPMO R&T Product Listing Directory at pld.iapmo.org

This listing period is based upon the last date of the month indicated on the Effective Date and Void After Date shown above. Any change in material, manufacturing process, marking or design without having first obtained the approval of the Product Certification Committee, or any evidence of non-compliance with applicable codes and standards or of inferior workmanship, may be deemed sufficient cause for revocation of this listing. Production of or reference to this form for advertising purposes may be made only by specific written permission of IAPMO Research and Testing, Inc. Any alteration of this certificate could be grounds for revocation of the listing. This document shall be reproduced in its entirety.

IAPMO RESEARCH AND TESTING, INC.

CERTIFICATE OF LISTING



Issued To: NUNGWON METAL IND. CO. LTD. (NWM)

Effective Date: May 2019

File Number: 5991

Product: Copper Water Tube

Void After: May 2024

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Identification:

The name or trademark of the manufacturer and the mark indicative of the type shall be permanently (incised) marked on each tube at intervals not greater than 1-1/2 ft. Tube in straight lengths shall be further identified throughout its length by means of a colored stripe, symbol, or logo not less than 3/16 in. in height, including a legend repeated at intervals not greater than 3 ft. The legend shall include the type of the tube, name or trademark of the manufacturer, or both, and the country of origin. The manufacturer has the option to include other information. Colors used are: green for Type K, blue for Type L, and red for Type M. Such color marking is not applicable to tube furnished in annealed straight lengths or coils.

From C10200 and C12000, the UNS copper designation shall be identified at intervals not greater than 3 ft with color coded ink per 19.3.2.

From C10200 and C12000, the UNS copper designation shall be identified with ink or some other permanent mark that is repeated at intervals not greater than 3 ft. Color marking to distinguish Type K from Type L is not required.

Tubing shall also bear the UPC® certification mark.

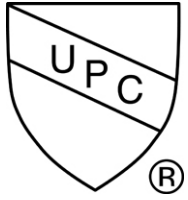
Characteristics:

Hard drawn and soft annealed copper water tube in various types and sizes available in 20 foot hard drawn lengths or 60 foot annealed coils. To be installed in accordance with the manufacturer's instructions, the requirements of the latest edition of the Uniform Plumbing Code.

Products listed on this certificate have been tested by an IAPMO R&T recognized laboratory. This recognition has been granted based upon the laboratory's compliance to the applicable requirements of ISO/IEC 17025.

IAPMO RESEARCH AND TESTING, INC.

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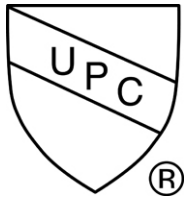
This certificate is not evidence of current listing. To verify listing status, visit the IAPMO R&T Product Listing Directory at pld.iapmo.org

Models

Model Number	Description
1/4"	K TYPE
3/8"	K TYPE
1/2"	K TYPE
5/8"	K TYPE
3/4"	K TYPE
1"	K TYPE
1-1/4"	K TYPE
1-1/2"	K TYPE
2"	K TYPE
2-1/2"	K TYPE
3"	K TYPE
3-1/2"	K TYPE
4"	K TYPE
5"	K TYPE
6"	K TYPE
8"	K TYPE
10"	K TYPE
1/4"	L TYPE
3/8"	L TYPE
5/8"	L TYPE
1-1/4"	L TYPE
1-1/2"	L TYPE
2"	L TYPE
2-1/2"	L TYPE
3"	L TYPE
3-1/2"	L TYPE
4"	L TYPE

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Product: Copper Water Tube

Void After: May 2024

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Model Number	Description
5"	L TYPE
6"	L TYPE
8"	L TYPE
10"	L TYPE
3/8"	M TYPE
1-1/4"	M TYPE
1-1/2"	M TYPE
2"	M TYPE
2-1/2"	M TYPE
3"	M TYPE
3-1/2"	M TYPE
4"	M TYPE
5"	M TYPE
6"	M TYPE
8"	M TYPE
10"	M TYPE

Models intended for potable water use

Model Number	Description
1/2"	M Type
3/4"	M Type
1"	M Type
1/2"	L Type
3/4"	L Type
1"	L Type