

**INTERNATIONAL ASSOCIATION OF PLUMBING
AND MECHANICAL OFFICIALS**

IAPMO GUIDE CRITERIA

FOR

**FLEXIBLE WATER CONNECTORS WITH EXCESS
FLOW SHUTOFF DEVICE**

IAPMO IGC 211-2005

1. PURPOSE

- 1.1** The purpose of this standard is to establish a generally acceptable standard for flexible water connectors that incorporate an excess flow shut-off mechanism used in potable water systems under continuous pressure and in accessible locations only. The intent of such devices is to protect personal property and building structures against water damage caused by accidental breakage, rupture or damage to downstream water connectors, appliances and plumbing fixtures.

The provisions of this standard are not intended to prevent the use of any alternate material or method of construction, provided any such alternate meets the intent and requirement of this document and changes are amended to this standard.

2. SCOPE

- 2.1** This standard serves to supplement the provisions of ASME A112.18.6, Flexible Water Connectors.
- 2.2** This standard covers minimum standards for materials in the construction of flexible connectors incorporating an excess flow shut-off device, and to prescribe minimum test requirements for the performance of said devices, together with methods of marking and identification.
- 2.3** Flexible connectors for water heater or boiler applications are excluded from this standard and shall not require electrical power for operation.

3. REFERENCED STANDARDS

- 3.1** All standards referenced herein shall be the current edition of that standard.

Copyright © 2005 by International Association of Plumbing and Mechanical Officials. All rights reserved. Printed in the United States of America. No part of this publication may be reproduced, stored in an electronic retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher.

4. DEFINITIONS

- 4.1 Maximum Normal System Flow Rate.** Flow rate of piping system at point of discharge from the fixture or appliance that the connector is installed.

5. GENERAL REQUIREMENTS

- 5.1 Flexible Connectors.** Flexible water connectors shall comply with the requirements in ASME A112.18.6.
- 5.2 Material**
- 5.2.1** Copper alloy components shall not contain less than 58% copper.
- 5.2.2** Wetted stainless steel components shall have corrosion resistance equal to or greater than UNS S30200 stainless steel.
- 5.2.3** Wetted plastic components shall comply with applicable sections of NSF/ANSI 61 and shall be suitable for continuous use in hot water at 180 °F (82°C).
- 5.3 Connection**
- 5.3.1 Pipe Threads.** Tapered pipe threads shall comply with the requirements in ASME A112.18.6, Section 3.3. entitled Pipe Threads.
- 5.3.2 Hose End Threads.** Hose end threads shall comply with the requirements in ASME A112.18.6, Section 3.3.2 entitled Hose End Threads.
- 5.3.3 Ballcock Threads.** Ballcock threads shall comply with the requirements in ASME A112.18.6, Section 3.3.3 entitled Ballcock Threads.
- 5.3.4 Compression Connections.** Compression connections shall comply with the requirements in ASME A112.18.6, Section 3.3.6 entitled Compression Connections.
- 5.3.5 Alternate Connections.** Connections other than those listed shall meet the performance requirements of this standard and dimensional requirements within the connection's performance standard.
- 5.4 Working Pressures.** Flexible water connector shall comply with the requirements in ASME A112.18.6, Section 3.5 entitled Working Pressures.

Copyright © 2005 by International Association of Plumbing and Mechanical Officials. All rights reserved. Printed in the United States of America. No part of this publication may be reproduced, stored in an electronic retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher.