




Date : 2018-09-11

CERTIFICATE OF COMPLIANCE

This certificate of compliance validates the following			
TEST REPORT NUMBER 'Assessment Reports' are not acceptable	EX27362-20170425	CERTIFICATE NUMBER	VIZY.EX27362
DATE OF ISSUE	2017-04-25	DATE OF ISSUE	2017-04-26
DATE OF EXPIRY	Only those products bearing the UL Mark should be considered to be Certified and covered under UL's Follow-Up Service.	DATE OF EXPIRY	Only those products bearing the UL Mark should be considered to be Certified and covered under UL's Follow-Up Service.
Manufacturer details			
NAME OF FACTORY / MANUFACTURER	International Industries Limited	NAME OF THE BRAND	INTERNATIONAL INDUSTRIES LIMITED
FACTORY ADDRESS / REGION (STREET / TOWN / CITY / COUNTRY)	LX 15-16, Landhi Industrial Area, Karachi - 75120, Pakistan	MODEL / NO	Schedule 10 (Black or Galvanised) steel sprinkler pipe in the 3/4, 1, 1-1/2, 2, 2-1/2, 3, 3 1/2, 4, 5, 8 and 10 inch sizes. Schedule 30 (Black or Galvanised) steel sprinkler pipe in the 8 inch size. Schedule 40 (Black or Galvanised) steel sprinkler pipe in the 1/2, 3/4, 1-1/4, 1-1/2, 2, 2-1/2, 3, 4, 5, 6 and 10 inch sizes.
WEBSITE	www.iil.com.pk	LOGO ON THE PRODUCT	
TEL	+92-21-35080451 to 5	EMAIL	ayaz.khan@iil.com.pk



Product Details From Test Report		Reference Test Report page NO												
DESCRIPTION OF THE PRODUCT (TECHNICAL DETAILS FROM TEST REPORT, SUCH AS ACTUAL FIRE RATINGS/DIMENSIONS/THICKNESS/ SENSITIVITY ETC)	<p>Metallic Sprinkler Pipe</p> <p>Metallic sprinkler pipe intended for use in water-based fire-protection systems for water-distribution or trim applications</p>	EX27362-20170425												
TEST STANDARD (SUCH AS ASTM/BS EN/ DN ETC)	<p>UL 852- Metallic Sprinkler Pipe for Fire Protection Service</p> <p>1 Scope</p> <p>1.1 These requirements cover metallic pipe intended for use in water based fire protection systems for water distribution or valve trim applications. These pipes may be used in fire protection systems when installed in accordance with the following Standards:</p> <p>a) Standard for Installation of Sprinkler Systems, NFPA 13;</p> <p>b) Standard for Installation of Sprinkler Systems in Residential Occupancies up to Four Stories in Height, NFPA 13R;</p> <p>c) Standard for Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes, NFPA 13D;</p> <p>d) Standard for Installation of Standpipe, Private Hydrants, and Hose Systems, NFPA 14;</p> <p>e) Standard for Water Spray Fixed Systems, NFPA 15;</p> <p>f) Standard for Installation of Foam-Water Spray Systems, NFPA 16; and</p> <p>g) Standard on Water Mist Fire Protection Systems, NFPA 750.</p> <p>1.2 Pipe is categorized by size, pressure rating, end configuration, (threaded or unthreaded) and wall thickness designation. Steel pipe is also categorized by the Corrosion Resistance Ratio (CRR).</p>	EX27362-20170425												
TEST DESCRIPTION	<p>The following tests from the referenced standard(s), as applicable to the products submitted, were conducted:</p> <table border="1"> <thead> <tr> <th>Standard</th> <th>Test</th> <th>Standard Section</th> </tr> </thead> <tbody> <tr> <td>852</td> <td>Examination of Samples</td> <td>6-10</td> </tr> <tr> <td>852</td> <td>Materials and Tensile</td> <td>17, 18</td> </tr> <tr> <td>852</td> <td>Marking</td> <td>21</td> </tr> </tbody> </table>	Standard	Test	Standard Section	852	Examination of Samples	6-10	852	Materials and Tensile	17, 18	852	Marking	21	EX27362-20170425
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	<table border="1"> <tr> <td>852</td> <td>Bending Moment</td> <td>12</td> </tr> <tr> <td>852</td> <td>Leakage</td> <td>13</td> </tr> <tr> <td>852</td> <td>Hydrostatic</td> <td>14</td> </tr> <tr> <td>852</td> <td>Vibration</td> <td>15</td> </tr> </table> <p>The results of this investigation including evaluation and testing indicate that the products are complied with applicable requirements of the Standard ANSI/UL 852- "Standard for Metallic Sprinkler Pipe for Fire Protection Service" and therefore, such products are judged eligible to bear UL's Mark.</p>	852	Bending Moment	12	852	Leakage	13	852	Hydrostatic	14	852	Vibration	15	
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<p>SPECIFICATION OF TEST SPECIMEN</p>	<p>The samples used for testing and evaluation were considered representative of the submitted products.</p>	<p>EX27362-20170425</p>												
<p>TEST RESULT (SUCH AS PASSED CRITERIA___/ COMPLIED TO___/ DURATION___/OBSERVATION___/ETC)</p>	<p>Pass – Only those products bearing the UL Mark should be considered to be Certified and covered under UL's Follow-Up Service</p>	<p>EX27362-20170425</p>												
<p>PRODUCT APPLICATION GUIDELINE (END USE) (CLEARLY STATE THE END USE WITH SPECIFIC APPLICATION, SUCH AS EXACT FIRE RATING/TO BE INSTALLED IN___/TO BE INSTALLED AT___/TO BE CONNECTED WITH___/TO BE INSTALLED WITH___ ETC ALONG WITH ANY WARNINGS SUCH AS NOT TO BE USED IN___/NOT TO BE INSTALLED AT___/ NOT TO BE INSTALLED WITH___ETC.</p>	<p>This category covers metallic sprinkler pipe intended for use in water-based fire-protection systems for water-distribution or trim applications. This pipe may be used in wet, preaction, deluge or dry-pipe-type sprinkler systems when installed in accordance with the following:</p> <p>ANSI/NFPA 13, "Installation of Sprinkler Systems" ANSI/NFPA 13D, "Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes" ANSI/NFPA 13R, "Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height" ANSI/NFPA 14, "Installation of Standpipe and Hose Systems" ANSI/NFPA 15, "Water Spray Fixed Systems for Fire Protection" ANSI/NFPA 16, "Installation of Foam-Water Sprinkler and Foam-Water Spray Systems" ANSI/NFPA 750, "Water Mist Fire Protection Systems"</p> <p>In accordance with the referenced NFPA Standards, the pipe sizes installed to distribute water to the sprinklers should be not less than 1 in. nominal for steel pipe and 3/4 in. for copper pipe.</p> <p>This category covers threaded and unthreaded (plain end) steel pipe. Steel pipe having lesser wall thicknesses than unthreaded Schedule 40 pipe may be threaded or plain end as indicated in the individual certifications. Plain-end pipe is intended to be joined by certified welded outlet fittings (see Fittings, Welded Outlet (VIZU)), which have been investigated for compatibility with the specific pipe. Plain-end pipe may also be joined by welding end-to-end or welding to flanges.</p>	<p>EX27362-20170425</p>												



Steel pipe covered under this category is also intended to be used in applications joined by certified rubber-gasketed fittings (see Fittings, Rubber Gasketed (VIZM)). In these applications the pipe is intended to be cut-grooved or roll-grooved in accordance with the certified rubber-gasketed fitting manufacturer's installation instructions, which have been investigated for compatibility with the specific pipe. Where indicated in the individual certifications, pipe may also be swage grooved by the pipe manufacturer.

Steel pipe with a wall thickness Schedule 10 pipe that is designated in ASTM A53, "Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless," ASTM A135, "Standard Specification for Electric-Resistance-Welded Steel Pipe," or ASTM A795, "Standard Specification for Black and Hot-Dipped Zinc-Coated (Galvanized) Welded and Seamless Steel Pipe for Fire Protection Use," incorporates the dimensions and materials specified for the designation. The applicable NFPA installation standards are intended to be followed for the minimum wall thickness requirements that allow pipe to be threaded, cut-grooved, roll-grooved or plain.

Steel pipe threading requires the use of thread gauges conforming to the dimensions of ANSI/ASME B1.20.1, "Pipe Threads, General Purpose (Inch)." This pipe has been investigated for both mechanical strength and relative corrosion resistance expressed in terms of a corrosion resistance ratio (CRR). This ratio for each size pipe is defined as follows:

$$CRR=(X/X40)^3$$

Where: X40 = Thickness of Schedule 40 pipe under the first exposed thread. The "first exposed thread" is the minimum pipe thickness exposed to both interior and exterior corrosion and occurs at the threaded joint assembly at a line defined by the thread width, just before the pipe engages the fitting.

X = Thickness of the certified pipe measured either under the first exposed thread for threaded pipe or at the thinnest wall section for unthreaded pipe.


The CRR will be greater than 1.00 when the wall thickness of the certified pipe is greater than the wall thickness of Schedule 40 pipe under the first exposed thread, and less than 1.00 when the certified pipe wall is thinner than the wall thickness of Schedule 40 pipe under the first exposed thread.



	<p>The corrosion performance of steel pipe can vary depending on the composition of the steel of which it is formed, the composition of the water(s) to which it is exposed and related service conditions.</p> <p>Authorities Having Jurisdiction should be consulted before installation</p> <p>Pipe materials have not been investigated for potability unless indicated in the individual certifications.</p> <p>Pipe has not been investigated for groove dimensions or the grooving process. Pipe is intended to be grooved in accordance with the certified rubber-gasketed fitting (see VIZM) manufacturer's installation instructions, which have been investigated for compatibility with the specific pipe.</p> <p>Coatings, platings or other surface treatments on the interior or exterior of the pipe have not been investigated for the ability to protect the pipe from corrosion, potability, or the effects of the coatings, platings or other surface treatments on components of the water-distribution system.</p>	
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Laboratory and Certification body details

NAME OF CERTIFICATION BODY	UL LLC	NAME OF TEST FACILITY	UL LLC
CERTIFICATION BODY ADDRESS / REGION <small>(STREET / TOWN / CITY / COUNTRY)</small>	333 Pfingsten Road, Northbrook, IL, USA	TEST FACILITY ADDRESS / REGION <small>(STREET / TOWN / CITY / COUNTRY)</small>	333 Pfingsten Road, Northbrook, IL, USA
WEBSITE	www.ul.com	WEBSITE	www.ul.com
TEL	+1-877-854-3577	TEL	+1-877-854-3577
EMAIL	FireandSecurity@ul.com	EMAIL	FireandSecurity@ul.com
ACCREDITED BY <small>(NAME OF ACCREDITATION BODY WHICH ISSUED ACCREDITATION TO THE CERTIFICATION BODY, ALONG WITH WEBSITE)</small>	American National Standards Institute (ANSI) as a product certification body ansi.org	ACCREDITED BY <small>(NAME OF ACCREDITATION BODY WHICH ISSUED ACCREDITATION TO THE LABORATORY, ALONG WITH WEBSITE)</small>	American National Standards Institute (ANSI) as a product certification body ansi.org
AS PER <small>(STANDARD TO WHICH THE CERTIFICATION BODY IS ACCREDITED TO)</small>	ISO/IEC 17065	AS PER <small>(STANDARD TO WHICH YOUR ORGANIZATION IS ACCREDITED TO)</small>	ISO/IEC 17065
VALIDITY <small>(EXPIRY DATE OF CERTIFICATION BODY ACCREDITATION)</small>	Active as of date of issuance of this certificate	VALIDITY <small>(EXPIRY DATE OF LABORATORY ACCREDITATION)</small>	Active as of date of issuance of this certificate
REFERENCE NUMBER: <small>(CERTIFICATION BODY ACCREDITATION REFERENCE NUMBER TO VERIFY ON THE ACCREDITOR'S WEBSITE)</small>	Accreditation ID #0198	REFERENCE NUMBER: <small>(THE LABORATORY ACCREDITATION REFERENCE NUMBER TO VERIFY ON THE ACCREDITOR'S WEBSITE)</small>	Accreditation ID# 0198
CERTIFICATION MARK			



(ENDORSEMENT) TO BE SIGNED BY MANUFACTURER			
NAME OF MANUFACTURER'S SIGNATORY	AYAZ AHMED KHAN	SIGNATURE	
EMAIL / TEL	+92-21-35080451 to 5 (Ext # 324)	FACTORY OFFICIAL SEAL	
NOTES: I Undertake that all data and information provided are genuine and accurate			

(ENDORSEMENT) TO BE SIGNED BY CERTIFICATION BODY			
NAME OF CERTIFICATION BODY SIGNATORY	Emil W. Misichko	SIGNATURE	
EMAIL / TEL	Emil.W.Misichko@ul.com +1-847-664-2036	CERTIFICATION BODY OFFICIAL SEAL	
NOTES: I Undertake that all data and information provided are genuine and accurate			

ATTACHMENTS:

COPY OF 'CERTIFICATE OF COMPLIANCE' ISSUED BY CERTIFICATION BODY (OLD OR NEW)



VIZY.EX27362 - METALLIC SPRINKLER PIPE

Metallic Sprinkler Pipe

See General Information for Metallic Sprinkler Pipe

INTERNATIONAL INDUSTRIES LIMITED

EX27362

LX 15-16, LANDHI INDUSTRIAL
AREA KARACHI, 75120 PAKISTAN

Schedule 10 (Black or Galvanised) steel sprinkler pipe in the 3/4, 1, 1-1/2, 2, 2-1/2, 3, 3 1/2, 4, 5, 8 and 10 inch sizes.

Schedule 30 (Black or Galvanised) steel sprinkler pipe in the 8 inch size.

Schedule 40 (Black or Galvanised) steel sprinkler pipe in the 1/2, 3/4, 1-1/4, 1-1/2, 2, 2-1/2, 3, 4, 5, 6 and 10 inch sizes.

Last Updated on 2017-04-26