











**Blazemaster**° pipes and fittings are designed specifically for fire sprinkler systems. They are made from a specialty thermoplastic known as chlorinated polyvinyl chloride (CPVC). **Blazemaster**° pipe and fittings provide unique advantages in sprinkler installations including superior hydraulics in comparison to traditional metal systems, ease of joining, increased hanger spacing and ease of assembly. Additionally it is base on a technology with a continuous and proven service history of more than 30 years.

#### BLAZEMASTER® CPVC FIRE SPRINKLER SYSTEM SPECIFICATION



#### Pipe

**Blazemaster**\* CPVC Sprinkler pipe in SDR 13.5 conforms to the requirements of ASTM F442.

#### **Fittings**

**Blazemaster** CPVC Sprinkler fittings conform to the requirement of ASTM F438 (Schedule 40) & ASTM F439 (Schedule 80). Female threaded adapters for sprinkler head connections with brass inserts.

#### **Solvent Cement**

**Blazemaster**\* CPVC socket connections should be joined with Weld-On\* Blazemaster\* Cement which meets ASTM F493. No other cements are recommended for use with Blazemaster\* products and use of such non-proved welding agents will invalidate the manufacturers warranty.

#### WHERE TO USE BLAZEMASTER CPVC FIRE SPRINKLER PIPING SYSTEM

#### **Applications**

- NFPA 13 Light Hazard occupanies as defined in the Standard for Installation of Sprinkler Systems, such as Churches, Schools, Hotels, Condominiums, Hospital, Offices & High Rises.
- NFPA 13D Residential occupancies as defined in the Standard for Sprinker Systems in One and Two Family Dwellings and Manufactured Homes.
- NFPA 13R Residential and Multi-family.
- NFPA 90 Air plenums, as defined by the Installation of Air Conditioning and Ventilating Systems
- NFPA 24 Underground water pressure service.



#### ADVANTAGES + PROVEN PERFORMANCE



Resistant to corrosion and scaling and foreign contaminant build even in salt air environments.



Greater resistance to seismic activity than copper or steel systems



Reduced installation time



Easily repaired or modified on site



Eliminates need for torches or complicated heat-fusion techniques.



Designed to 50 year Life expectancy



Simple joining method.



Lightweight. Allows greater ease of installation.



Ensure optimal flow rate and excellent hydraulic capabilities (C-Factor of 150) that will not diminish over time. Allows for pipe downsizing & Pump rate reduction.



Little to no maintenance required

#### FLAME AND SMOKE RESISTANT

#### **Flammability**

**Blazemaster\*** is suitable for wet, automatic fire sprinkler systems because of its excellent balance of properties such as lightweight, excellent corrosion resistance, low friction loss, and easy installation. It is unique in that it offers outstanding resistance to fire and low smoke generation.

#### **Burning Resistance**

CPVC will not sustain burning. It must be forced to burn due to it's very high Limiting Oxygen Index (LOI) of 60. LOI is the percentage of oxygen needed in an atmosphere to support combustion, Since earth's atmposphere is only 21% oxygen, CPVC will not burn unless a flame is constantly applied and stops burning when the ignition source is removed.

#### **Smoke Generation**

The smoke toxicity of CPVC pipe is low compared with the common building and finish materials present in homes.

#### FRICTION LOSS IN PIPE

A great advantage that **Blazemaster**\* pipe enjoys over its metallic competitors is a smooth inner surface which is resistant to scaling and fouling. This means that friction pressure losses in the beginning and do not significantly increase as the systems ages, as can be the case with metal pipes. The values in the following fluid flow tables are based on the Hazen Williams formula and a surface roughness constant of C=150 for **Blazemaster**\* Pipe, providing a maximum water flow coverage.



Surface roughness constant for other piping material are given below:

$$f=0.2083 \left(\frac{100}{C}\right)^{1.85} \frac{g \ 1.852}{d \ 4.8655}$$

Where f = friction head in feet of water per 100 feet of pipe

d = inside diameter of pipe in inches

g = flow rate in gallons per minute

c = pipe surface roughness constant

#### Constant (C) Type of Pipe

150 CPVC Pipe, new-40 Years

130-140 Steel/Cast Iron Pipe, New

125 Steel Pipe, old

120 Cast Iron, 4-12 years old

110 Galvanized Steel/Cast Iron 13-20 Years

60-80 Cast Iron, Worn/Pitted

#### **BLAZEMASTER® CPVC PIPE RANGE**

Blazemaster' Pipe Dimensions (SDR 13.5) - Inches (Millimeters)



Nominal Size			Outside Diameter (OD)			Wall Thickness (T)			Allowable Water				
Non - UL		U	L	Average		Tolerance Min		Mini	Minimum Toler		ance	Pressure Rating	
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	at 73°F / 22.7°C	
1/2"	15			0.840	21.3	±0.004	0.10	0.062	1.57	+0.02	0.51		
3/4"	20	3/4"	20	1.050	26.7	±0.004	0.10	0.078	1.98	+0.02	0.51		
1"	25	1″	25	1.315	33.4	±0.005	0.13	0.097	2.46	+0.02	0.51	100000000000000000000000000000000000000	
1-1/4"	32	1-1/4"	32	1.660	42.2	±0.005	0.13	0.123	3.12	+0.02	0.51	315 PSI	
1-1/2"	40	1-1/2"	40	1.900	48.2	±0.006	0.15	0.141	3.58	+0.02	0.51	(22.22 kg/cm <sup>2</sup> )	
2"	50	2"	50	2.375	60.3	±0.006	0.15	0.176	4.47	+0.021	0.53		
2-1/2"	65	2-1/2"	65	2.875	73.0	±0.007	0.18	0.213	5.41	+0.026	0.66		
3″	80	3″	80	3.500	88.9	±0.008	0.20	0.259	6.58	+0.031	0.79		
4"	100			4.500	114.3	±0.009	0.23	0.333	8.46	+0.04	1.02		

Note: SDR 13.5 (Standard Dimensional Ratio 13.5) means the ratio of outside diameter to wall thickness (ASTM F442)

#### **BLAZEMASTER' NON-UL FITTINGS**

ELBOW 90°	Size		
ELDOW 90°	in	mm	
	1/2	15	
	3/4	20	
	1	25	
	1-1/4	32	
UU	1-1/2	40	
	2	50	
	2-1/2	65	
A STATE OF THE STA	3	80	
	4	100	

ELBOW 45°	Size			
ELBOW 45°	in	mm		
	1/2	15		
	3/4	20		
	1	25		
	1-1/4	32		
	1-1/2	40		
	2	50		
	2-1/2	65		
	3	80		
	4	100		

CROSS TEE	The second second	and the second
CRO33 ILL	in	mm
	1/2	15
	3/4	20
	1	25
	1-1/4	32
	1-1/2	40
	2	50
	2-1/2	65
	3	80
	4	100

TEE	Si	ze
1.55	in	mm
П	1/2	15
	3/4	20
	1	25
	1-1/4	32
	1-1/2	40
	2	50
	2-1/2	65
	3	80
	4	100

END CAP	JILC			
END CAP	in	mm		
	1/2	15		
	3/4	20		
	1	25		
	1-1/4	32		
	1-1/2	40		
	2	50		
	2-1/2	65		
	3	80		
	4	100		

COUPLING	Siz	ze
COUPLING	in	mm
	1/2	15
-	3/4	20
	1	25
HH	1-1/4	32
	1-1/2	40
	2	50
	2-1/2	65
	3	80
	4	100



ELBOW 22.5°	Si	ze
ELBOW 22.3°	in	mm
	1-1/2	40
9		

FLANCE	Si	Size		
FLANGE	in	mm		
	1/2	15		
	3/4	20		
	1	25		
	1-1/4	32		
	1-1/2	40		
	2	50		
	2-1/2	65		
	3	80		
	4	100		

FLANGE	Size		
FLANGE RUBBER PAD	in	mm	
	2	50	
	2-1/2	65	
	3	80	

MALE THREADED	Si	ze
ADAPTER	in	mm
	1/2	15
	3/4	20
	1	25
	1-1/4	32
	1-1/2	40
	2	50
	2-1/2	65
	3	80
	4	100

REDUCING COUPLING	Siz	e	Size		
REDUCING COUPLING	in	mm	in	mm	
	3/4 x 1/2	20 x 15	1-1/2 x 1-1/4	40 x 32	
	1 x 1/2	25 x 15	2 x 1/2	50 x 15	
	1 x 3/4	25 x 20	2 x 3/4	50 x 20	
	1-1/4 x 1/2	32 x 15	2 x 1	50 x 25	
	1-1/4 x 3/4	32 x 20	2 x 1-1/4	50 x 32	
	1-1/4 x 1	32 x 25	2 x 1-1/2	50 x 40	
	1-1/2 x 1/2	40 x 15	2-1/2 x 2	65 x 50	
	1-1/2 x 3/4	40 x 20	3 x 2	80 x 50	
	1-1/2 x 1	40 x 25	3 x 2-1/2	80 x 65	

REDUCING BUSHING	Size		Size	
NEDOCING DOSITING	in	mm	in	mm
	3/4 x 1/2	20 x 15	2 x 3/4	50 x 20
	1 x 1/2	25 x 15	2 x 1	50 x 25
	1 x 3/4	25 x 20	2 x 1-1/4	50 x 32
	1-1/4 x 1/2	32 x 15	2 x 1-1/2	50 x 40
	1-1/4 x 3/4	32 x 20	2-1/2 x 2	65 x 50
	1-1/4 x 1	32 x 25	3 x 2	80 x 50
	1-1/2 x 1/2	40 x 15	3 x 2-1/2	80 x 65
	1-1/2 x 3/4	40 x 20	4 x 2	100 x 50
	1-1/2 x 1	40 x 25	4 x 2-1/2	100 x 65
	1-1/2 x 1-1/4	40 x 32	4 x 3	100 x 80
	2 x 1/2	50 x 15		

DEDUCING TEE	Size		Size		Siz	e
REDUCING TEE	in	mm	in	mm	in	mm
П	3/4 x 3/4 x 1/2	20 x 20 x 15	2 x 2 x 3/4	50 x 50 x 20	4 x 4 x 1	100 x 100 x 32
	1 x 1 x 1/2	25 x 25 x 15	2 x 2 x 1	50 x 50 x 25	4 x 4 x 1-1/2	100 x 100 x 40
	1 x 1 x 3/4	25 x 25 x 20	2 x 2 x 1-1/4	50 x 50 x 32	4 x 4 x 2	100 x 100 x 50
	1-1/4 x 1-1/4 x 1/2	32 x 32 x 15	2 x 2 x 1-1/2	50 x 50 x 40	4 x 4 x 2-1/2	100 x 100 x 6
	1-1/4 x 1-1/4 x 3/4	32 x 32 x 20	2-1/2 x 2-1/2 x 1	65 x 65 x 25	4 x 4 x 3	100 x 100 x 80
	1-1/4 x 1-1/4 x 1	32 x 32 x 25	2-1/2 x 2-1/2 x 1-1/2	65 x 65 x 40		
	1-1/2 x 1-1/2 x 1/2	40 x 40 x 15	2-1/2 x 2-1/2 x 2	65 x 65 x 50		
	1-1/2 x 1-1/2 x 3/4	40 x 40 x 20	3 x 3 x 1	80 x 80 x 25		
	1-1/2 x 1-1/2 x 1	40 x 40 x 25	3 x 3 x 1-1/2	80 x 80 x 40		
	1-1/2 x 1-1/2 x 1-1/4	40 x 40 x 32	3 x 3 x 2	80 x 80 x 50		
	2 x 2 x 1/2	50 x 50 x 15	3 x 3 x 2-1/2	80 x 80 x 65		

FEMALE THREADED	Size		
ADAPTER ELBOW (BRASS)	in	mm	
	1/2 x 1/2	15 x 15	
	3/4 x 1/2	20 x 15	
<u> </u>	1 x 1/2	25 x 15	
	1 x 3/4	25 x 20	

Si	ze
in	mm
1 1-1/4 1-1/2 2	25 32 40 50
	1 1-1/4 1-1/2

Size	
in	mm
3/4 x 1/2 1 x 1/2 1 x 3/4	20 x 15 25 x 15 25 x 20
	3/4 x 1/2 1 x 1/2

\* available in BSPT or NPT

\* available in BSPT or NPT

\* available in BSPT or NPT



FEMALE THREADED	Size	e	
ADAPTER TEE (BRASS)	in	mm	
	1/2 x 1/2	15 x 15	
	3/4 x 1/2	20 x 15	
	1 x 1/2	25 x 15	
	1-1/4 x 1/2	32 x 15	
	1-1/2 x 1/2	40 x 15	
	2 x 1/2	50 x 15	

		BSPT	

MALE ADAPTER	Siz	Size	
MALE ADAPTER (BRASS)	in	mm	
un home			
	1	25	
nn	1-1/4	32	
	1-1/4 1-1/2	25	
	2	50	

\* available in BSPT or NPT

### **BLAZEMASTER® UL FITTINGS**

ELBOW 90°	Siz	Size	
ELBOW 90°	in	mm	
	3/4	20	
	1 1	25	
	1-1/4	32	
U	1-1/2	40	
	2	50	
	2-1/2	65	
Jan San San San San San San San San San S	3	80	

ELBOW 45°	Si	ze
ELBOW 45°	in	mm
	3/4	20
	1	25
	1-1/4	32
	1-1/2	40
	2	50
	2-1/2	65
	3	80

CROSS TEE	Size		
CNOSS ILL	in	mm	
	3/4	20	
	1	25	
	1-1/4	32	

TEE	Size		
	in	mm	
	3/4	20	
	1 1	25	
	1-1/4	32	
	1-1/2	40	
	2	50	
	2-1/2	65	
	3	80	

END CAP	Size		
END CAP	in	mm	
	2/4	20	
	3/4	20	
	1	25	
	1-1/4	32	
	1-1/2	40	
	2	50	
3			

COUPLING	Size	
COUPLING	in	mm
	3/4	20
	1	25
H	1-1/4	32
	1-1/2	40
	2	50
	2-1/2	65
	3	80

REDUCING COUPLING	Size		Size	2
REDUCING COUPLING	in	mm	in	mm
	1 x 3/4	25 x 20	2-1/2 x 2	65 x 50
	1-1/4 x 1	32 x 25	3 x 2	80 x 50
	1-1/2 x 1	40 x 25	3 x 2-1/2	80 x 65
	1-1/2 x 1-1/4	40 x 32		
11 6.55	2 x 1	50 x 25		
	2 x 1-1/4	50 x 32		
	2 x 1-1/2	50 x 40		

REDUCING BUSHING	Size	
REDUCING BUSHING	in	mm
	1 x 3/4	25 x 20
	1-1/4 x 1	32 x 25
	1-1/2 x 1	40 x 25
	1-1/2 x 1-1/4	40 x 32
	2 x 1	50 x 25
	2 x 1-1/4	50 x 32
	2 x 1-1/2	50 x 40



DEDUCING TEE	Size		Size	
REDUCING TEE	in	mm	in	mm
п	1 x 1 x 3/4	25 x 25 x 20	2 x 2 x 1	50 x 50 x 25
	1-1/4 x 1-1/4 x 3/4	32 x 32 x 20	2 x 2 x 1-1/4	50 x 50 x 32
	1-1/4 x 1-1/4 x 1	32 x 32 x 25	2 x 2 x 1-1/2	50 x 50 x 40
	1-1/4 x 1 x 1	32 x 25 x 25	2-1/2 x 2-1/2 x 1	65 x 65 x 25
	1-1/2 x 1-1/4 x 1	40 x 32 x 25	2-1/2 x 2-1/2 x 1-1/4	65 x 65 x 32
	1-1/2 x 1-1/2 x 3/4	40 x 40 x 20	2-1/2 x 2-1/2 x 1-1/2	65 x 65 x 40
	1-1/2 x 1-1/2 x 1	40 x 40 x 25	2-1/2 x 2-1/2 x 2	65 x 65 x 50
	1-1/2 x 1-1/2 x 1-1/4	40 x 40 x 32	3 x 3 x 2	80 x 80 x 50
	2 x 1-1/2 x 1	50 x 40 x 25	3 x 3 x 2-1/2	80 x 80 x 65
	2 x 2 x 3/4	50 x 50 x 20	See Control of a see that the see	

FEMALE THREADED	Size	
FEMALE THREADED ADAPTER ELBOW (BRASS)	in	mm
	3/4 x 1/2BSPT 1 X 1/2BSPT 3/4 X 1/2NPT 1 X 1/2NPT	20 x 15 20 x 15 25 x 15 25 x 15

\* available in BSPT or NPT

FEMALE THREADED ADAPTER (SOCKET)	Size	
ADAPTER (SOCKET)	in	mm
	1x1	25 x 25
	1-1/4 x 1-1/4	32 x 32

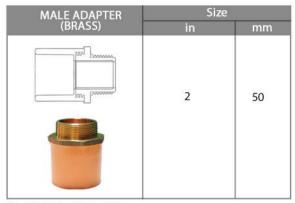
* availabl	e in BSP	T or NPT
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3/4 x 1/2 20 x 15 1 x 1/2 25 x 15	SPRINKLER	Siz€	9
	ADAPTER (SOCKET)	in	mm
1 x 1/2 25 x 15		3/4 x 1/2	20 x 15
		1 x 1/2	25 x 15

\* available in BSPT or NPT

FEMALE THREADED	Size	
FEMALE THREADED ADAPTER (SOCKET)	in	mm
	1 x 1 1-1/4 x 1-1/4	25 x 25 32 x 32

\* available in BSPT or NPT



\* available in BSPT or NPT

## **ACCESSORIES**

PIPE CUTTER	Size
	1/2" - 1-1/4"

DEBURRING TOOL	Size
	1/2" - 2"

WELD-ON® BLAZEMASTER® CEMENT	Size
SO TIRE SPRINGER CENTY  A CONTROL OF THE CONTROL OF	1 Pint (16 oz.)

#### JOINING BLAZEMASTER CPVC FIRE SPRINKLER SYSTEM



#### 1.) Cutting

Cut pipe squarely using a ratchet cutter, a wheel-type plastic tubing cutter, a power saw, or a fine toothed saw.



#### 2.) Deburring

Use a chamfering tool or other tool to remove burrs and fittings from the inside and outside of the pipe.



#### 3.) Jointing Preparation

Using a clean, dry rag, wipe loose dirt and moisture from the fitting socket and pipe end.



#### 4.) Application of Cement

Apply solvent cement outside the Spigot of pipe using a brush or dauber.



Apply solvent cement inside the fitting socket. Do not puddle the cement in fitting.



#### 5.) Assembling

Immediately insert the pipe into the fitting socket while rotating the pipe 1/4 turn and hold for 30 seconds.



#### 6.) Completed Assembly

A bead of solvent cement should be



#### **PROJECTS: LOCAL**

# BlazeMaster . FIRE PROTECTION SYSTEMS

#### I. Residential



Century Commonwealth Quezon City - 22 Storeys



The Royalton Pasig City - 64 Storeys



Viridian San Juan City - 53 Storeys



Oceanaire Pasay City - 17 Storeys



D University Place Manila City - 33 Storeys



iPacific Residences Manila City - 23 Storeys



The Imperium Pasig City - 62 Storeys



Solano Hills Parañaque City - 5 Storeys



Avila Tower Quezon City 23 Storeys & 41 Storeys



Crescent Park The Fort, BGC - 28 Storeys



Blue Sapphire Residence The Fort, BGC - 27 Storeys



The Grand Hamptons II Taguig City - 20 Storeys

#### II. Commercial & Hospital



Bohol Hennan Resort Panglao, Bohol



Tambuli Beach Club Mactan Island, Cebu



Grand Imperial Hotel Iloilo City



Mandarin Plaza Hotel Cebu City



Manila Doctor's Hospital Manila City



UST General Hospital Manila City



#### **PROJECTS: ABROAD**

#### I. Residential



Brickell View West 13 Storeys



Circle On Cavill 69 Storeys



Solimar Condo 12 Storeys



5th and Madison 24 Storeys



1800 Club 42 Storeys



Marina Bay Club 12 Storeys



Classic Residence by Hyatt



Shangri-La Hotel, Vancouver



Holiday Inn Express, West Buckhead



Waterfront Marriott, Seattle



Renaissance Hotel



Springhill Suites

#### III. Office and School



State Capitol Building Boise





University of Chicago Slippery Rock University



IV. Hospital

Ketchikan General Hospital



Santa Fe Hospital



Baptist Memorial Hospital



#### **OUR LATEST BUREAU OF FIRE PROTECTION MEMORANDUM**





# Republic of the Philippines Department of the Interior and Local Government Bureau of Fire Protection NATIONAL HEADQUARTERS Agham Road, Brgy. Bagong Pag-asa, Quezon City



#### MEMORANDUM

TO

Regional Directors, BFP Regions 1-12, ARMM, CAR CARAGA and NCR;

Director, FNTI; and Heads of Offices, BFP-National Headquarters

SUBJECT

Use of Chlorinated Polyvinyl Chloride (CPVC) Pipes and Fittings for Fire

Sprinkler Systems

DATE

21 March 2012

A number of queries have reached this Office regarding the applicability of Chlorinated Polyvinyl Chloride (CPVC) Pipes and Fittings, and its Sealant for fire sprinkler systems.

The BFP acknowledges that new pipe materials and the development of new methods for installing and joining pipes for fire sprinkler system have emerged in the country.

However, any product, technology, system and/or device intended to be used for fire safety measures in buildings, specifically for fire sprinkler systems, is permitted provided that it complies with appropriate provisions of National Fire Protection Association (NFPA), Listing Agencies such as but not limited to Underwriters Laboratories (UL), Factory Mutual (FM) Global and Loss Prevention Certification Board (LPC8), and other internationally-accepted standards, as well as supplementary and/or complimentary standards cited therein.

For CPVC Pipes and Fittings, and its Sealant, NFPA 13 series permits its use, provided that they are installed in accordance with their listing limitations, including installation instructions. On the other hand, the BFP may refer to NFPA 25 on the CPVC Water-based Fire Sprinkler System inspection, testing and maintenance.

As per NFPA 13 (Standard for the Installation of Sprinkler Systems), light hazard occupancies include occupancies having uses and conditions similar to animal shelters, churches, clubs, educational, hospitals (including animal hospitals and veterinary facilities), institutional, kennels, libraries (except large stack rooms), museums, nursing or convalescent homes, offices (including data processing), residential, restaurant seating areas, theaters and auditoriums (excluding stages and prosceniums), and unused attics. All high-rise building/structure applications are allowable subject to NFPA 13 light hazard occupancy limitations.

As per NFPA 1 (Fire Prevention Code), light hazard occupancies may include some buildings or rooms occupied as offices, classrooms, churches, assembly halls, guest room areas of hatels/motels, etc. This classification anticipates that the majority of content items are either noncombustible or so arranged that a fire is not likely to spread rapidly.

In this regard and considering the above, advise your Officers and Personnel that basically, UL-listed Chlorinated Polyvinyl Chloride (CPVC) Pipes and Fittings, and its Sealant for Fire Sprinkler Systems are applicable for light hazard occupancies as defined in NFPA 13.

Additional applications, including, but not limited to air plenum, system risers, underground, attic and garage installations, shall be referred to the CPVC manufacturer and/or design engineer as prescribed/allowed by NFPA or other internationally-accepted standards and/or listings, together with its supplementary and/or complimentary standards.

For widest dissemination and compliance

SAMUEL R PEREZ

Officer-in-Charge/

Deputy Chief for Administration

a. Romi

cc : Secretary, DILG



#### OUR LATEST BUREAU OF FIRE PROTECTION MEMORANDUM





Republic of the Philippines
Department of the Interior and Local Government
Bureau of Fire Protection
NATIONAL HEADQUARTERS
Aghan Road, Bigy Bagong Pag-asa, Quezon City



#### MEMORANDUM

TO:

All BFP Regional Directors

NFTI Director

Provincial/District Fire Marshals/City/Municipal Fire Marshals

Limitations and Applicability of Chlorinated Polyvinyl Chloride (CPVC) Pipes and Fittings for Sprinkler System

SUBJECT: DATE:

08 June 2015

- 1. The introduction of new methods and technologically-advanced equipments/gadgets in the prevention and suppression of fires have helped the agency in fulfilling its mandates effectively and efficiently. Nonetheless, any product, technology, system and/or device intended to be used for the safety measures in buildings, specifically for fire sprinkler system, still have limitations in its applications and must be regulated to ensure that safety will not be compromised and the provisions of the Fire Code will still be strictly followed.
- 2. Relatively, a memorandum dated 21 March 2012 was issued, to give the field units a clear and categorical guidance on the use of CPVC Pipes and Fittings for Sprinkler System, however, it seems that its provisions and/or contents have been overlooked, if not totally unaware, by the field units. Hence, the following conditions enumerated on the aforesaid memorandum are hereby reiterated and must be considered first by the local BFP offices prior to approval of applications submitted to their office:
  - a. Any product, technology, system and/or device specifically for Fire Sprinkler System can be permitted, provided that it complies with appropriate provisions of National Fire Protection Association (NFPA), Listing Agencies such as but not limited to Underwriter Laboratories (U.). Factory Mutual (FM), Global Loss Prevention Certification Board (LPCB), and other internationally-accepted standards, as well as supplementary and/or complimentary standards cited thereon;
  - b. For CPVC Pipes and Fittings, and its Sealant, NFPA 13 series permits its use, provided that they are installed in accordance with their listing limitations, including installation instructions. On the other hand, the BFP may refer to NFPA 25 on the CPVC Water-based Fire Sprinkler System inspection, testing and maintenance.
  - c. As per NFPA 13 (Standard for the installation of Sprinkler System), light hazard occupancies include occupancies having uses a conditions similar to animal shelters, churches, clubs, educational, hospitals (including animal hospitals and veterinary facilities), institutional, kennels, libranes (except large stock rooms), 'museums, nursing or convalescent homes, offices (including data processing), residential, restaurant seating areas, theaters and auditoriums (including stages and prosceniums), and unused attice. All high-rise building/structure applications are allowable subject to NFPA 14 light hazard occupancy limitations.



- d. As per NFPA 1 (Fire Prevention Code), light hazard occupancies may include some buildings or rooms occupied as offices, classrooms, churches, assembly halls, guest room areas of hotels/motels, etc. This classification anticipates that the majorities of content items are either noncombustible or so arranged that a fire is not likely to spread rapidly
- 3. Considering the above, it is worthy to note that UL-listed CPVC Pipes and Fittings, and its Sealants for Fire Sprinkler Systems are applicable for light hazard occupancies as defined in NFPA 13. Additional applications, including, but not limited to air plenum, system risers, underground attic and garage installations, shall be referred to the CPVC manufacturer and/or design engineer as prescribed/allowed by NFPA or other internationally-accepted standards and/or listings, together with supplementary and/or complimentary standards.
  - 4. For widest dissemination and compliance

BY AUTHORITY OF THE CHIEF, BFP:

IGMEDIO U BONDOCIR SSUPT (DSC) BFP Director for Fire Safety and Prevention

Other Brands:





