# FLASHSHIELD™ - SAFETY IN LAYERS, WITHOUT ADDITIONAL BONDING

#### **PRODUCT DESCRIPTION:**

FlashShield™ is CSA design certified to ANSI LC1-2005 for "Fuel Gas Piping Systems Using Corrugated Stainless Steel Tubing (CSST)." CSST supplies natural gas or liquefied petroleum gas (LP gas) to appliances. Simple hand tools such as tubing cutters, wrenches and utility knives are all that are needed to work with the FlashShield components. FlashShield is a reliable, costeffective system that can be installed in all modes of construction: residential, commercial and industrial; new construction and retrofits.

FlashShield is a patent-pending multi-layered CSST product designed to create a lightningresistant system. We started with a unique layer of metal mesh, which is designed to dissipate heat and electricity. Then we placed the mesh between two jackets of semi-conductive polymer. To complete the system, we redesigned our fittings to ensure seamless continuity with the mesh. FlashShield fittings are designed with a patent pending feature that bites through the first layer of semi conductive polymer and into the metal mesh. This creates electrical continuity throughout the system. The FlashShield system eliminates the manufacturer's requirement for direct bonding. The fitting's the tubing, so even the most unsightly cut will yield a tight seal. The FlashShield fitting requires minimal torque for easy fitting installation. With no o-rings or gaskets, the reusable brass components provide a reliable metal-to-metal installation.

The FlashShield system is listed by several independent third party laboratories and is recognized by model building codes throughout North America.

#### **FEATURES & BENEFITS:**

- Metallically-shielded gas piping system.
- Metal mesh layer dissipates electricity.
- New fittings provide continuity with metal mesh.
- No manufacturer-required direct bonding.
- No special routing requirements or restrictions.
- Only product that meets strict criteria of both LC1024 & LC1027
- Flexibility means quick and easy installations. FlashShield installs 30-70% faster than traditional piping methods.
- Pre-marked by the foot, there's no measuring, rigid pipe cutting or threading. This means less waste and fewer fittings.
- 75% fewer fittings in the average installation means a safer system, less leak potential and reduced callbacks.
- FlashShield CSST is lightweight 250 feet of 1/2" CSST weighs approximately 50 pounds and can be easily transported and handled on the job.
- Custom lengths of tubing and job-specific accessories for those large and multi-family projects can be easily obtained by a simple telephone call.
- Jacket complies with requirements of ASTM E84 25/50 index for flame and smoke.



# FLASHSHIELD™ FITTINGS Continued:

# Tee Run Tee Fifting

#### FLASHSHIELDTM TEE FITTINGS\*

Part No.	Description	Pkg. Qty.	Lbs./Box
FST-8-12	1/2" Run x 1/2" Run x 1/2" Tee - Tee Fitting	12/Box	10.8
FST-11-12	3/4" Run x 3/4" Run x 3/4" Tee - Tee Fitting	12/Box	16.5
FST-16-6	1" Run x 1" Run x 1" Tee - Tee Fitting	6/Box	13.4
FST-11-8-8-6	3/4" Run x 1/2" Run x 1/2" Tee - Tee Fitting	6/Box	7.3
FST-11-11-8-6	3/4" Run x 3/4" Run x 1/2" Tee - Tee Fitting	6/Box	7.6
FST-16-11-8-6	1" Run x 3/4" Run x 1/2" Tee - Tee Fitting	6/Box	9.4
FST-16-11-11-6	1" Run x 3/4" Run x 3/4" Tee - Tee Fitting	6/Box	5.4
FST-16-16-8-6	1" Run x 1" Run x 1/2" Tee - Tee Fitting	6/Box	10.5
FST-16-16-11-6	1" Run x 1" Run x 3/4" Tee - Tee Fitting	6/Box	6.5

<sup>\*</sup>All FlashShield (FS) Fittings and Tees can be used with Yellow Gastite CSST

# FLASHSHIELD™ MODULAR STUB SYSTEM:

## **APPLICATION:**

• All Stubs create a fixed point "stub-out" on a wall or floor surface for meter and appliance attachment.

#### **MATERIAL / SPECIFICATIONS:**

- Schedule 40 steel pipe complying with material standard ASTM A-53.
- Exterior plating Black oxide coating after all threading, forming and welding.

## **FEATURES AND BENEFITS:**

- Reduces the number of joints in the system where contractors typically fabricate "stub-outs" from rigid pipe nipples, elbows and couplings.
- Provides a fixed-point termination for installations where the appliances are not yet installed.
- Creates a more polished look to the overall installation.

# FLASHSHIELD™ MOUNTING HARDWARE:

#### APPLICATION:

• FSOUTLETBOX creates a secure recessed termination point for connection to moveable appliances.

#### **MATERIAL / SPECIFICATIONS:**

• FSOUTLETBOX – Ball Valve ANSI Z21.15 or ANSI/ASME B16.33.



Appliance Stub-Outs

#### MODULAR STUB SYSTEM

Part No.	Description	Pkg. Qty.	Lbs./Box
FS-APSTUB-8-10	1/2" FlashShield™ x 1-1/2" Stub Length x 1/2" NPT	10/Box	15.2
FS-L-APSTUB-8-10	1/2" FlashShield™ x 2-1/4" Stub Length x 1/2" NPT	10/Box	13.3
FS-APSTUB-11-10	3/4" FlashShield™ x 1-1/2" Stub Length x 1/2" NPT	10/Box	18.5
FS-L-APSTUB-11-10	3/4" FlashShield™ x 2-1/4" Stub Length x 1/2" NPT	10/Box	19.9
FS-APSTUB-11-11-10	3/4" FlashShield™ x 1-1/2" Stub Length x 3/4" NPT	10/Box	19.8
FS-L-APSTUB-11-11-10	3/4" FlashShield™ x 2-1/4" Stub Length x 3/4" NPT	10/Box	21.6



FS-Outlet Box

#### MOUNTING HARDWARE

Part No.	Description	Pkg. Qty.	Lbs./Kit
FSOUTLETBOX-8	Recessed Gas Outlet Box w/ 1/2" FlashShield™ Fitting	1 Kit	1.6
FSOUTLETBOX-11	Recessed Gas Outlet Box w/ 3/4" FlashShield™ Fitting	1 Kit	2.2
FSOUTLETBOX-FR8	Recessed FireStop Gas Outlet Box w/ 1/2" FlashShield™ Fitting	1 Kit	3.8
FSOUTLETBOX-FR11	Recessed FireStop Gas Outlet Box w/ 3/4" FlashShield™ Fitting	1 Kit	4.2

# **XR2 SERIES FITTINGS:**

## **APPLICATION:**

- Straight Fittings connect the flexible gas piping to gas supply, distribution manifolds or gas appliances.
- Tee Fittings create a branch line on tubing runs.
- Couplings allow for the splicing and additions to the flexible gas piping.

## **MATERIAL / SPECIFICATIONS:**

• Fitting adapter, bushings and nut – Brass.

## **FEATURES AND BENEFITS:**

- Tool-less flare design; no special tools are required.
- Metal-to-metal seal, with no split rings, O-rings or gaskets.
- Self-guiding assembly to ensure a perfectly even flare.
- Exclusive, patented Jacket-Lock, fitting eliminates exposed stainless steel beyond the nut.
- All components are fully re-useable.



Straight Fitting

#### XR2/FLASHSHIELD SERIES STRAIGHT FITTING (ADAPTER/NUT/BUSHING)

Part No.	Description	Pkg. Qty.	Lbs./Box
XR2FTG-6-24	3/8" Straight Fitting – 1/2" NPT	24/Box	5.3
XR2FTG-8-24	1/2" Straight Fitting – 1/2" NPT	24/Box	6.8
XR2FTG-11-24	3/4" Straight Fitting – 3/4" NPT	24/Box	9.8
XR2FTG-16-12	1" Straight Fitting – 1" NPT	12/Box	7.6
FSFTG-20-6**	1-1/4" FlashShield Straight Fitting – 1-1/4" NPT	6/Box	6.2
XR2FTG-24-4	1-1/2" Straight Fitting – 1-1/2" NPT	4/Box	6.2
XR2FTG-32-4	2" Straight Fitting – 2" NPT	4/Box	9.5



Straight Female Fitting

#### XR2 SERIES STRAIGHT FEMALE FITTING (ADAPTER/NUT/BUSHING)

Part No.	Description	Pkg. Qty.	Lbs./Box
XR2FTGFM-8-24	1/2" Straight Fitting – 1/2" Female NPT	24/Box	7.5
XR2FTGFM-11-8-24	3/4" Straight Fitting – 1/2" Female NPT	24/Box	11.7
XR2FTGFM-11-24	3/4" Straight Fitting – 3/4" Female NPT	24/Box	10.5



Reducing Fitting

# XR2 SERIES REDUCING FITTING (ADAPTER/NUT/BUSHING)

Part No.	Description	Pkg. Qty.	Lbs./Box
XR2REDFTG-11-08-24	3/4" Reducing Fitting – 1/2" NPT	24/Box	9.7
XR2REDFTG-16-12-12	1" Reducing Fitting – 3/4" NPT	12/Box	6.7



Tee Fittina

## FLASHSHIELD/GASTITE TEE FITTING\*

Part No.	Description	Pkg. Qty.	Lbs./Box
FST-8-12	1/2" Run x 1/2" Run x 1/2" Tee - Tee Fitting	12/Box	10.8
FST-11-12	3/4" Run x 3/4" Run x 3/4" Tee - Tee Fitting	12/Box	16.5
FST-16-6	1" Run x 1" Run x 1" Tee - Tee Fitting	6/Box	13.4
FST-11-8-8-6	3/4" Run x 1/2" Run x 1/2" Tee - Tee Fitting	6/Box	7.3
FST-11-11-8-6	3/4" Run x 3/4" Run x 1/2" Tee - Tee Fitting	6/Box	7.6
FST-16-11-8-6	1" Run x 3/4" Run x 1/2" Tee - Tee Fitting	6/Box	9.4
FST-16-11-11-6	1" Run x 3/4" Run x 3/4" Tee - Tee Fitting	6/Box	5.4
FST-16-16-8-6	1" Run x 1" Run x 1/2" Tee - Tee Fitting	6/Box	10.5
FST-16-16-11-6	1" Run x 1" Run x 3/4" Tee - Tee Fitting	6/Box	6.5





Part No.	Description	Pkg. Qty.	Lbs./Box
XR2CPL-6-12	3/8" Coupling	12/Box	3.5
XR2CPL-8-12	1/2" Coupling	12/Box	5.4
XR2CPL-11-12	3/4" Coupling	12/Box	7.4
XR2CPL-16-6	1" Coupling	6/Box	4.7
FSCPL-20-6**	1-1/4" FlashShield Coupling	6/Box	9.5
XR2CPL-24-4	1-1/2" Coupling	4/Box	12.5
XR2CPL-32-4	2" Coupling	4/Box	18.9

Note: Fitting Components available. Please contact Customer Service for pricing.

<sup>\*</sup>All FlashShield (FS) Fittings and Tees can be used with Yellow Gastite CSST