

## DESCRIPTION

Reliable sealing from durable gaskets is critical to protecting shipboard equipment, as well as the safety of the crew and the marine environment, from the potential hazards of leaking piping and pump casings. Drew Marine sheet jointings are designed to provide this reliability—with a selection that allows you to choose what works best for your vessel.

For certain general service applications, some operators prefer jointings made from familiar materials that have been commonly used for many years. You can also contact your Drew Marine representative for a selection of these cost-effective, conventional jointings featuring the best quality materials for each construction.

## APPLICATION & USE

Can be used for low-temperature and pressure service for contact with gas, oils and solvents. Suitable for less demanding applications, such as crankcase door and inspection door joints, gear case and transformer joints.

## MAXIMUM TEMPERATURE

105°C

## CONSTRUCTION

Manufactured from synthetic rubber and high-grade cork granules pressure-bonded together for effective sealing where economy is a priority.

## PHYSICAL PROPERTIES

|                              |                       |
|------------------------------|-----------------------|
| Hardness:                    | 50 to 70 Duro Shore A |
| Tensile:                     | 200% Minimum          |
| Compressibility @ 400 PSI:   | 35% to 45%            |
| Recovery (Minimum):          | 75%                   |
| Compression Set with ASTM:   | 40% Maximum           |
| Method A for 22 hours @ 70°C |                       |

## PACKAGING

| Sizes                                   | PCN     |
|---|---------|
| 0.8mm x 1.5m x 1.0 (1/32" x 60" x 40")  | 8102725 |
| 1.5mm x 1.5m x 1.0m (1/16" x 60" x 40") | 8102741 |
| 3.0mm x 1.5m x 1.0m (1.8" x 60" x 40")  | 8102758 |

## JOINTING PRODUCT SELECTION AND INSTALLATION

In selecting gasketing material for a flanged connection, there are many variables that must be considered to ensure a proper seal. In addition to the basic requirements for temperature, pressure, fluid characteristics and application, these variables include: the metallurgy of the flange, amount of bolt stretch, the flange surface finish, and any additives in the fluid. Leakage allowance is another important factor in view of increasingly strict regulatory limits that now measure leakage in parts per million.

For satisfactory performance, it helps to keep in mind:

- Gasket performance generally decreases as the material thickness increases.
- Thicker materials also require increasing compressive loads.
- Proper bolting sequences (see figure) must be followed to keep compressive loads uniform.
- Applications near the upper end of a jointing's temperature and pressure working range may require a different material. Our technical staff can help you determine the best product for those cases.

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The primary factors influencing the choice of gasketing are usually considered in the following order:

### Temperature of the Fluid at the Gasketing Joint

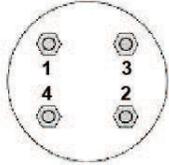
The number of suitable products decreases substantially as temperatures rise above 95 °C (200 °F), with only a select few able to handle temperatures approaching 540 °C (1000 °F). A step-up to a superior material is recommended when system operating temperatures are near a particular gasket material's maximum continuous operating temperature limit. Applications with cryogenic temperatures also require careful gasketing selection.



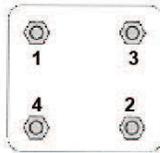
Contact your Drew Marine representative for more information

## CORRECT BOLD PATTERNS

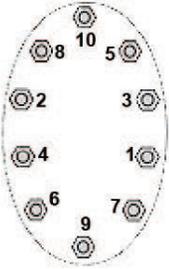
**Circular 4 Bolt**



**Square 4 Bolt**



**Non-Circular**



**Circular**

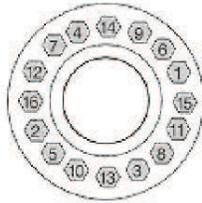


Figure courtesy of Garlock Sealing Technologies

## APPLICATION

The type of flange and bolts in the application determines the compressive load available to seal the gasket. Use the gasket dimensions to calculate the surface area being compressed. Then use the number, size and grade of the bolts to calculate the total available compressed load. This data has been calculated and is available upon request for standard ANSI raised face flanges. However, compressive stress available on non-standard flanges must be individually calculated. Call your Drew Marine representative if you would like assistance.

## FLUIDS

A relatively small number of fluids account for most of the service requirements encountered in the marine industry. In addition to the primary operating fluid, be sure to consider any fluids used for system flushes and cleaning. We can assist with identifying chemical compatibilities for all of our jointing materials.

Internal pressure of the fluid at the gasketed joint - if severe and frequent pressure changes are involved, give our marine representative the details so we can advise on alternative products.

## INSTALLATION PROCEDURES TO ENSURE A SATISFACTORY JOINT

- Center the gasket on the flange--especially critical for raised face flanges.
- Check for satisfactory surface finish and flatness
- Tighten bolts to compress gasket evenly by going from side to side around the joint.
- Ensure correct initial loading by using a torque wrench and well-lubricated fasteners with hardened flat washers.
- Tighten all bolts in one-third increments, according to proper bolting patterns (see figure on previous page).
- Re-torque 12 to 24 hours after start-up, whenever possible.
- Observe all applicable safety standards, including lockout/tagout procedure.
- Never use liquid or metallic-based anti-stick or lubricating compounds with the gaskets to limit risk of premature failure.



# Drew Marine®

400 Captain Neville Drive  
Waterbury, CT 06705 USA  
1-973-526-5700  
Drew-Marine.com