



**OSECO**



**RUPTURE PANELS**

# Deflagration Venting

Successful venting of an enclosure during deflagration is essential to the safety of all concerned. Providing adequate vent area is one of the most important factors to be considered when sizing the vent area of an enclosure.

The NFPA (National Fire Protection Association) has provided standards and proper sizing equations for relief areas for enclosures. OSECO's SizeRite™ sizing software, takes into consideration all necessary variables when sizing a rupture panel for your application.

The following definitions should be noted and taken into consideration when the venting of an enclosure is being considered.

**DEFLAGRATION: A FLAME FRONT PROPAGATING THROUGH UNBURNED MEDIA LESS THAN THE SPEED OF SOUND (SUBSONIC VELOCITY).**

**DETONATION: A FLAME FRONT PROPAGATING THROUGH UNBURNED MEDIA GREATER THAN THE SPEED OF SOUND (SONIC VELOCITY).**

**EXPLOSION: A POINT AFTER DETONATION OCCURS WHERE THE INTERNAL PRESSURE EXCEEDS THE ULTIMATE STRENGTH OF THE ENCLOSURE.**

**PMAX: THE MAXIMUM INTERNAL PRESSURE WHICH THE ENCLOSURE CAN SUSTAIN.**

**PRED: THE MAXIMUM ALLOWABLE INTERNAL PRESSURE THE ENCLOSURE WILL EXPERIENCE DURING A VENTED DEFLAGRATION.**

**PSTAT: THE DESIGNED PRESSURE THAT THE RUPTURE PANEL OPENS AND VENTING BEGINS.**

**RUPTURE PANEL: A PRESSURE AND TEMPERATURE SENSITIVE MEMBRANE DESIGNED TO RUPTURE AT A PREDETERMINED PRESSURE AND TEMPERATURE. ALSO-KNOWN-AS, EXPLOSION VENTS OR VENT PANELS.**

***"Deflagration venting is one means of controlling damage. By releasing expanding gases through an opening engineered for that purpose, it is possible to maintain a reduced maximum pressure (Pred) that is below that which would cause unacceptable damage." NFPA 68, Sec.2-2.6.***

***"The choice of the most effective and reliable means for explosion control should be based on an evaluation that includes the specific hazard and objectives for protection." NFPA 68. Sec1-1.2***

Many of the applications for rupture panels and the venting of enclosures occur in the processing of grain and the associated dust. Grain dust is a highly explosive media and a natural occurrence in the pneumatic handling and conveying of grain.

Guidelines for Starch, Grain Elevators, Feed Mills, and Agricultural Commodities have now been consolidated in the NFPA 61 Bulletin, Standards for the Prevention of Fires and Dust Explosions in Agricultural and Food Products Facilities.

# Rupture Panels

OSECO manufactures rupture panels in square, rectangular and round shapes. These panels may be flat, crowned and/or insulated, depending on type, style and size.

**Factors that should be considered when selecting a rupture panel:**

- ❖ **material of construction required**
- ❖ **media being vented**
- ❖ **normal operating temperature**
- ❖ **maximum temperature**
- ❖ **nominal working pressure**
- ❖ **rupture pressure required (Pstat)**
- ❖ **location of the vent (interior or exterior)**
- ❖ **new or retrofit application**
- ❖ **static or cycling application**
- ❖ **vacuum condition**
- ❖ **vent area required**

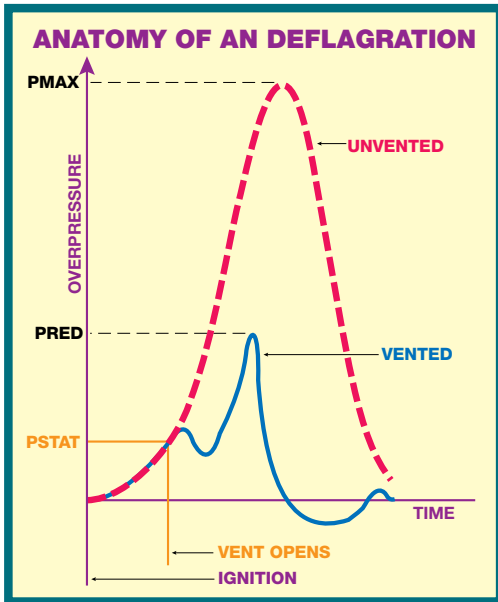
The advantages of using rupture panels over other methods of venting are economical cost and a leak-tight seal. OSECO rupture panels are dependable and efficient. The composite construction provides strength for static and high vacuum applications. OSECO's use of laser scoring technology provides exactness, dependability and repeatability in establishing set rupture pressures.

The finished product is a pressure sensitive rupture panel that is accurate, dependable and provides rapid response venting in the event of a deflagration.

**Features and options of the OSECO rupture panel product include:**

- ❖ **leak tight seal**
- ❖ **standard & special sizes**
- ❖ **minimal or zero fragmentation**
- ❖ **flat or crowned design**
- ❖ **broad range of materials available**
- ❖ **welded or bolted frames**
- ❖ **square, rectangle or round shapes available**
- ❖ **insulated panels for elevated temperatures**
- ❖ **rapid opening**
- ❖ **maximum vent area**
- ❖ **cycling or static service**
- ❖ **test certifications**
- ❖ **emergency service**
- ❖ **total in-house manufacturing capabilities**

***Dust Collectors & Arrestors, Bucket & Drag Conveyors, Blenders, Mixers, Crushers, Grinders, Pulverizers, Driers, Ovens & Furnaces, Ducts, Bins, Silos, Grain Elevators or Any Application where deflagrations are possible!***



# Anatomy of a Deflagration:

This graph represents a deflagration.

The dotted line shows what happens in a non-vented enclosure, which allows the deflagration to increase in pressure and speed until an explosion occurs.

The solid line represents a reaction occurring in a vented enclosure.

At the **P<sub>stat</sub>** point the vents will open and the enclosure is allowed to vent the internal pressure from the deflagration... This robs the deflagration of one of the four elements (**combustible media, ignition source, oxidant and containment**) which are required for an explosion.

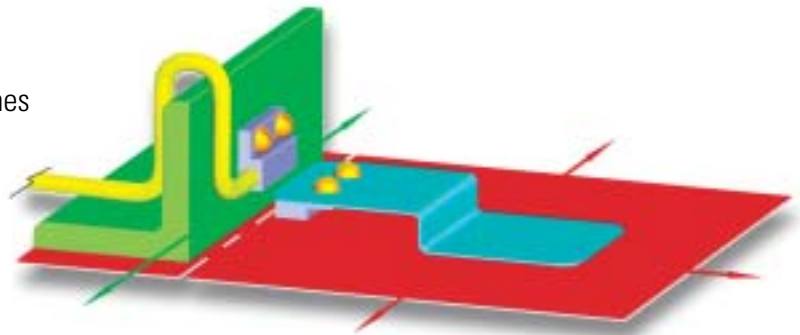
When containment is lost, the media is allowed to burn safely with minimal damage to the enclosure.

# Rupture Panel System

To make your safety system state-of-the-art, consider the OSECO RUPTURE PANEL SYSTEM. It consists of an OSECO Rupture Panel, an OSECO Rupture Panel Frame and an OSECO Rupture Panel Sensor and Alarm Module.

## Rupture Panel Sensor

Specify the Model SVT-03 sensor. It comes equipped with magnetic reed switches and when the panel opens it sets off an alarm. The sensor utilizes a Normally Closed circuit which may be connected to any continuity based sensing device such as the OSECO BDA Alarm Module. Upon rupture, the reed switch circuit is opened and electronically signals the rupturing or opening of the panel.



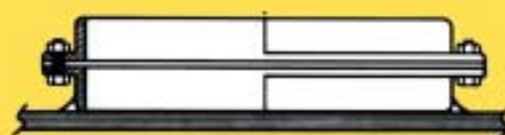
## Rupture Panel Alarm Module

The alarm module is hard-wired to the sensor. Both an audible alarm and a visual red L.E.D. signals the rupturing of the panel.

This modular system can handle individual installations or can be packaged to accommodate multiple alarms. The installation of this system provides the total control you need for deflagration monitoring and response control.

# Rupture Panel Frames

OSECO Rupture Panels are designed for installation in standard rupture panel frames of bolted or welded design. Standard rupture frame materials are carbon steel or 304 stainless steel.







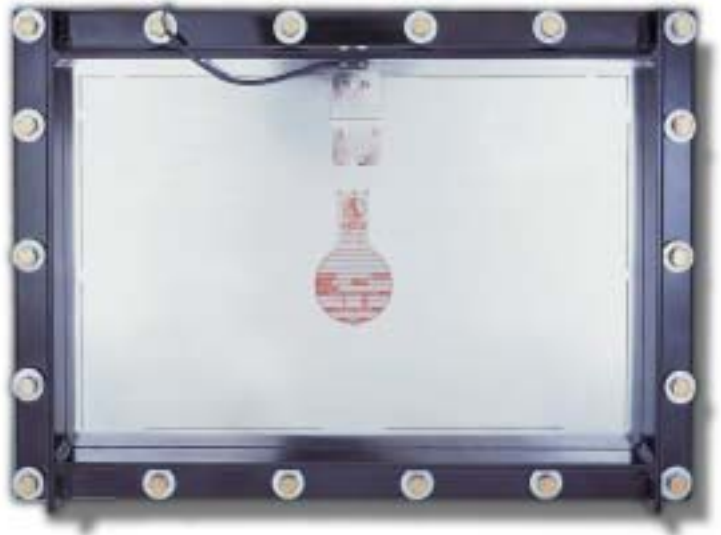
# CRV Rupture Panels

OSECO's Model CRV Rupture Panel is a heavy-duty design incorporating much thicker materials than standard rupture panel designs. Positive system pressure should be limited to 50% of Pstat. If exposed to vacuum in excess of 50% Pstat, vacuum bars should be added to the frame assembly.

The side-hinged design guarantees excellent performance while providing a safe, dependable and economic solution for limiting the damaging effects characteristic of deflagrations.

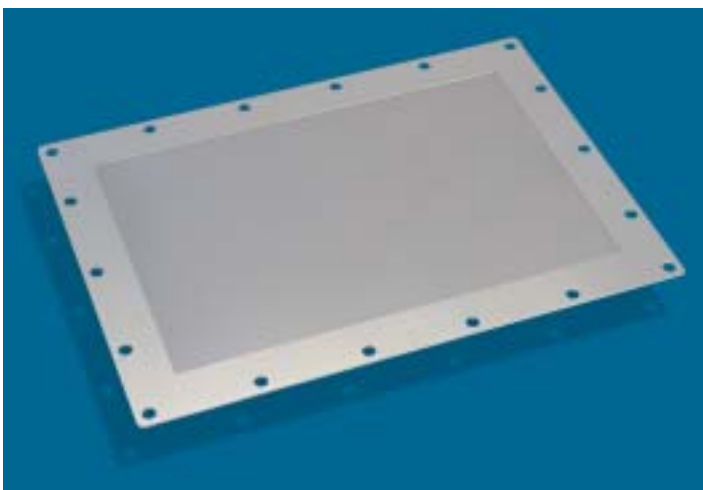
The exactness in design, manufacturing techniques and testing, assures a superior product that provides over-pressure protection and with minimal or no fragmentation.

The Model CRV is an excellent choice for rupture panel applications when the rupture panels are subjected to high cycling service.



\*Shown w/optional SVT-03 Alarm Sensor

# MV/MVS\* Rupture Panel



OSECO's newest innovation in the rupture panel product line is the M.V. (Metal Vent) Rupture Panel. This all-metal panel is available in many of the same sizes, temperature ratings and pressure ratings as the CRV rupture panels. The M.V.S. is identical to the M.V. panel with the exception of the use of FDA approved gaskets for use in sanitary service applications. A vacuum support and ring is standard for all applications. Standard rupture panel frames may be used for M.V. & M.V.S. installations. The SVT-03 sensor is also available to make your rupture panel system complete. The Model M.V. / M.V.S. is an excellent choice for vacuum service or where product build-up is a concern.



\* MV/MVS panels are available in select sizes only. Consult OSECO factory for your specific application.

# CRV/MV/MVS\* RUPTURE PANEL SPECIFICATIONS

SIZE INCHES (mm)	RELIEF AREA in <sup>2</sup> (m <sup>2</sup> )	RUPTURE PRESSURES AVAILABLE			
		TEFLON SEAL PSIG @ 72° F (bar)		ALUMINUM SEAL PSIG @ 72° F (bar)	
8" x 8" (203mm x 203mm)	54 (0.035)	1.5 (0.103)	10.0 (0.689)	N/A	N/A
9" x 12" (229mm x 305mm)	94 (0.061)	1.4 (0.097)	10.0 (0.689)	N/A	N/A
12" x 12" (305mm x 305mm)	129 (0.083)	1.4 (0.097)	10.0 (0.689)	N/A	N/A
12" x 18" (305mm x 457mm)	196 (0.127)	1.3 (0.090)	10.0 (0.689)	N/A	N/A
12" x 24" (305mm x 610mm)	264 (0.170)	1.3 (0.090)	10.0 (0.689)	N/A	N/A
16" x 18" (406mm x 457mm)	266 (0.172)	1.3 (0.090)	10.0 (0.689)	N/A	N/A
17-1/8" x 17 1/8" (435mm x 435mm)	272 (0.175)	1.3 (0.090)	10.0 (0.689)	N/A	N/A
13.9" x 22.8" (354mm x 580mm)	294 (0.190)	1.25 (0.103)	10.0 (0.689)	N/A	N/A
19.7" x 19.7" (500mm x 500mm)	363 (0.234)	1.25 (0.086)	10.0 (0.689)	6.6 (0.455)	10.0 (0.689)
18" x 24" (457mm x 610mm)	405 (0.261)	1.2 (0.083)	10.0 (0.689)	6.6 (0.455)	10.0 (0.689)
20" x 24" (508mm x 610mm)	452 (0.291)	1.2 (0.083)	10.0 (0.689)	6.4 (0.441)	10.0 (0.689)
18" x 28" (457mm x 711mm)	474 (0.306)	1.2 (0.083)	10.0 (0.689)	6.2 (0.427)	10.0 (0.689)
18" x 30" (457mm x 762mm)	508 (0.328)	1.2 (0.083)	10.0 (0.689)	6.0 (0.414)	10.0 (0.689)
24" x 24" (610mm x 610mm)	546 (0.352)	1.2 (0.083)	10.0 (0.689)	5.8 (0.400)	10.0 (0.689)
18" x 35" (457mm x 889mm)	595 (0.384)	1.2 (0.083)	10.0 (0.689)	5.5 (0.379)	10.0 (0.689)
18" x 36" (457mm x 914mm)	612 (0.395)	1.2 (0.083)	10.0 (0.689)	5.5 (0.379)	10.0 (0.689)
20.5" x 32.3" (520mm x 820mm)	626 (0.404)	1.2 (0.083)	10.0 (0.689)	5.5 (0.379)	10.0 (0.689)
18" x 37-3/4" (457mm x 959mm)	642 (0.414)	1.2 (0.083)	10.0 (0.689)	5.5 (0.379)	10.0 (0.689)
24" x 30" (610mm x 762mm)	685 (0.442)	1.1 (0.076)	10.0 (0.689)	5.2 (0.356)	10.0 (0.689)
27" x 27.5" (686mm x 699mm)	708 (0.457)	1.1 (0.076)	10.0 (0.689)	5.2 (0.356)	10.0 (0.689)
27.6" x 27.6" (700mm x 700mm)	725 (0.468)	1.1 (0.076)	10.0 (0.689)	5.2 (0.356)	10.0 (0.689)
23.1" x 36.2" (586mm x 920mm)	797 (0.514)	1.1 (0.076)	10.0 (0.689)	5.2 (0.356)	10.0 (0.689)

SIZE INCHES (mm)	RELIEF AREA in <sup>2</sup> (m <sup>2</sup> )	RUPTURE PRESSURES AVAILABLE			
		TEFLON SEAL PSIG @ 72° F (bar)		ALUMINUM SEAL PSIG @ 72° F (bar)	
24" x 36" (610mm x 914mm)	825 (0.532)	1.0 (0.069)	10.0 (0.689)	4.6 (0.317)	10.0 (0.689)
30" x 30" (762mm x 762mm)	862 (0.556)	1.0 (0.069)	10.0 (0.689)	4.5 (0.310)	10.0 (0.689)
20.5" x 44" (521mm x 1118mm)	859 (0.554)	1.0 (0.069)	10.0 (0.689)	4.5 (0.310)	10.0 (0.689)
20" x 48" (508mm x 1219mm)	914 (0.589)	1.0 (0.069)	10.0 (0.689)	4.4 (0.303)	10.0 (0.689)
27" x 36" (686mm x 914mm)	931 (0.601)	1.0 (0.069)	10.0 (0.689)	4.3 (0.296)	10.0 (0.689)
25" x 40" (635mm x 1016mm)	957 (0.618)	1.0 (0.069)	10.0 (0.689)	4.2 (0.290)	10.0 (0.689)
27" x 39" (686mm x 991mm)	1010 (0.652)	1.0 (0.069)	9.6 (0.662)	4.1 (0.283)	9.6 (0.662)
24" x 44" (610mm x 1118mm)	1011 (0.652)	1.0 (0.069)	9.6 (0.662)	4.1 (0.283)	9.6 (0.662)
25" x 43" (635mm x 1092mm)	1030 (0.664)	1.0 (0.069)	9.5 (0.655)	4.0 (0.276)	9.5 (0.655)
27" x 40" (686mm x 1016mm)	1036 (0.669)	1.0 (0.069)	9.5 (0.655)	4.0 (0.276)	9.5 (0.655)
30" x 36" (762mm x 914mm)	1038 (0.669)	1.0 (0.069)	9.5 (0.655)	4.0 (0.276)	9.5 (0.655)
25.5" x 43.1" (648mm x 1096mm)	1056 (0.681)	1.0 (0.069)	9.5 (0.655)	4.0 (0.276)	9.5 (0.655)
24" x 47" (610mm x 1194mm)	1081 (0.697)	1.0 (0.069)	9.2 (0.634)	3.9 (0.269)	9.2 (0.634)
24" x 48" (610mm x 1219mm)	1104 (0.712)	0.9 (0.062)	9.1 (0.627)	3.8 (0.262)	9.1 (0.627)
27" x 43" (686mm x 1092mm)	1115 (0.719)	0.9 (0.062)	9.1 (0.627)	3.8 (0.262)	9.1 (0.627)
25" x 47" (635mm x 1194mm)	1127 (0.727)	0.9 (0.062)	9.1 (0.627)	3.8 (0.262)	9.1 (0.627)
27.5" x 44.3" (698mm x 1126mm)	1171 (0.755)	0.9 (0.062)	9.1 (0.627)	3.8 (0.262)	9.1 (0.627)
25" x 49" (635mm x 1245mm)	1176 (0.758)	0.9 (0.062)	9.1 (0.627)	3.8 (0.262)	9.1 (0.627)
31.5" x 39.4" (800mm x 1000mm)	1195 (0.771)	0.9 (0.062)	9.1 (0.627)	3.8 (0.262)	9.1 (0.627)
36" x 36" (914mm x 914mm)	1251 (0.807)	0.8 (0.055)	8.6 (0.593)	3.7 (0.255)	8.6 (0.593)
30" x 44" (762mm x 1118mm)	1272 (0.820)	0.8 (0.055)	8.6 (0.593)	3.7 (0.255)	8.6 (0.593)
27" x 52" (686mm x 1321mm)	1351 (0.872)	0.7 (0.048)	8.4 (0.579)	3.5 (0.241)	8.4 (0.579)

SIZE INCHES (mm)	RELIEF AREA in <sup>2</sup> (m <sup>2</sup> )	RUPTURE PRESSURES AVAILABLE			
		TEFLON SEAL PSIG @ 72° F (bar)		ALUMINUM SEAL PSIG @ 72° F (bar)	
27.5" x 51.6" (698mm x 1310mm)	1365 (0.880)	0.7 (0.048)	8.4 (0.579)	3.5 (0.241)	8.4 (0.579)
30" x 48" (762mm x 1219mm)	1389 (0.896)	0.7 (0.048)	8.4 (0.579)	3.5 (0.241)	8.4 (0.579)
36" x 38" (914mm x 965mm)	1396 (0.901)	0.7 (0.048)	8.4 (0.579)	3.5 (0.241)	8.4 (0.579)
25.5" x 57.1" (648mm x 1450mm)	1401 (0.904)	0.7 (0.048)	8.4 (0.579)	3.5 (0.241)	8.4 (0.579)
31.5" x 47.2" (800mm x 1200mm)	1437 (0.927)	0.7 (0.048)	8.3 (0.572)	3.5 (0.241)	8.3 (0.572)
39.4" x 39.4" (1000mm x 1000mm)	1501 (0.968)	0.7 (0.048)	8.3 (0.572)	3.5 (0.241)	8.3 (0.572)
27" x 58" (686mm x 1473mm)	1509 (0.973)	0.7 (0.048)	8.2 (0.565)	3.5 (0.241)	8.2 (0.572)
27.5" x 57.1" (698mm x 1450mm)	1512 (0.975)	0.7 (0.048)	7.9 (0.545)	3.4 (0.234)	7.9 (0.545)
36" x 44" (914mm x 1118mm)	1533 (0.989)	0.7 (0.048)	7.9 (0.545)	3.4 (0.234)	7.9 (0.545)
25" x 66" (635mm x 1676mm)	1588 (1.024)	0.6 (0.041)	7.8 (0.538)	3.3 (0.228)	7.8 (0.538)
27" x 66" (686mm x 1676mm)	1719 (1.109)	0.5 (0.034)	7.4 (0.510)	3.2 (0.221)	7.4 (0.510)
36.2" x 49.4" (920mm x 1254mm)	1733 (1.118)	0.5 (0.034)	7.4 (0.510)	3.2 (0.221)	7.4 (0.510)
30" x 60" (762mm x 1524mm)	1740 (1.122)	0.5 (0.034)	7.4 (0.510)	3.2 (0.221)	7.4 (0.510)
42" x 44" (1067mm x 1118mm)	1794 (1.157)	0.5 (0.034)	7.4 (0.510)	3.1 (0.214)	7.4 (0.510)
44" x 44" (1118mm x 1118mm)	1881 (1.213)	0.5 (0.034)	7.2 (0.496)	3.1 (0.214)	7.2 (0.496)
44.5" x 44.5" (1130mm x 1130mm)	1925 (1.241)	0.5 (0.034)	7.1 (0.490)	3.0 (0.207)	7.1 (0.490)
36" x 60" (914mm x 1524mm)	2097 (1.353)	0.5 (0.034)	7.0 (0.483)	3.0 (0.207)	7.0 (0.483)
39" x 66.5" (990mm x 1690mm)	2524 (1.628)	0.3 (0.021)	6.4 (0.441)	2.8 (0.193)	6.4 (0.441)
44" x 60" (1118mm x 1524mm)	2573 (1.660)	0.3 (0.021)	6.4 (0.441)	2.8 (0.193)	6.4 (0.441)
42" x 65" (1067mm x 1651mm)	2660 (1.716)	0.3 (0.021)	6.3 (0.434)	2.8 (0.193)	6.3 (0.434)
44" x 69" (1118mm x 1753mm)	2962 (1.911)	0.2 (0.014)	6.1 (0.421)	2.7 (0.186)	6.1 (0.421)

For Sizes Or Pressures Not Listed, Please Consult Factory

\* The M.V. / M.V.S. panels do not require seal materials; the min/max tables are the same as CRV panels listed with Teflon Seals. MV/MVS panels are available in select sizes only. Consult OSECO factory for your specific application.



# CRVC Rupture Panels

OSECO's Model CRVC Rupture Panel is a domed, rectangular design that withstands higher positive or negative system operating pressures than flat panel designs. Panel frame vacuum support bars that may restrict flow are not required. The CRVC is well suited for high cycling service.

The side-hinged design guarantees excellent performance while providing a safe, dependable and economic solution for limiting the damaging effects characteristics of deflagrations.

The exactness in design, manufacturing techniques and testing, assures a superior product that provides over-pressure protection and with minimal or no fragmentation.



Recommended maximum ratio of system operating pressure to rated rupture pressure is:

- 70% for Crowned Panels

Rupture Tolerances:

- $\pm 1/2$  PSI for Panels Rated Above 2 psig.
- $\pm 1/4$  PSI for Panels Rated 2 psig or Less.



*Insulated Crowned Rupture Panels (CRVCI) are available for special applications. Please consult factory.*

# CRVC RUPTURE PANEL SPECIFICATIONS

SIZE INCHES (mm)	RELIEF AREA in <sup>2</sup> (m <sup>2</sup> )	RUPTURE PRESSURES AVAILABLE		RELIEF AREA in <sup>2</sup> (m <sup>2</sup> )	SIZE INCHES (mm)	ALUMINUM SEAL PSIG @ 72° F MIN (bar)	ALUMINUM SEAL PSIG @ 72° F MAX (bar)
		TEFLON SEAL PSIG @ 72° F MIN (bar)	TEFLON SEAL PSIG @ 72° F MAX (bar)				
8" x 8" (203mm x 203mm)	42 (0.035)	N/A	N/A	N/A	N/A	N/A	N/A
9" x 12" (229mm x 305mm)	78 (0.050)	2.4 (0.165)	10.0 (0.689)	N/A	N/A	N/A	N/A
12" x 12" (305mm x 305mm)	110 (0.071)	2.4 (0.165)	10.0 (0.689)	N/A	N/A	N/A	N/A
12" x 18" (305mm x 457mm)	173 (0.111)	2.3 (0.159)	10.0 (0.689)	N/A	N/A	N/A	N/A
12" x 24" (305mm x 610mm)	236 (0.152)	2.3 (0.159)	10.0 (0.689)	N/A	N/A	N/A	N/A
16" x 18" (406mm x 457mm)	239 (0.154)	2.3 (0.159)	10.0 (0.689)	7.8 (0.538)	10.0 (0.689)	7.8 (0.538)	10.0 (0.689)
17-1/8" x 17 1/8" (435mm x 435mm)	244 (0.157)	2.3 (0.159)	10.0 (0.689)	7.7 (0.531)	10.0 (0.689)	7.7 (0.531)	10.0 (0.689)
13.9" x 22.8" (354mm x 580mm)	265 (0.171)	2.25 (0.155)	10.0 (0.689)	7.5 (0.517)	10.0 (0.689)	7.5 (0.517)	10.0 (0.689)
19.7" x 19.7" (500mm x 500mm)	330 (0.213)	2.25 (0.155)	10.0 (0.689)	7.5 (0.517)	10.0 (0.689)	7.5 (0.517)	10.0 (0.689)
18" x 24" (457mm x 610mm)	371 (0.239)	1.9 (0.131)	10.0 (0.689)	7.5 (0.517)	10.0 (0.689)	7.5 (0.517)	10.0 (0.689)
20" x 24" (508mm x 610mm)	416 (0.268)	1.9 (0.131)	10.0 (0.689)	7.5 (0.517)	10.0 (0.689)	7.5 (0.517)	10.0 (0.689)
18" x 28" (457mm x 711mm)	437 (0.282)	1.9 (0.131)	10.0 (0.689)	7.5 (0.517)	10.0 (0.689)	7.5 (0.517)	10.0 (0.689)
18" x 30" (457mm x 762mm)	470 (0.303)	1.9 (0.131)	10.0 (0.689)	7.0 (0.483)	10.0 (0.689)	7.0 (0.483)	10.0 (0.689)
24" x 24" (610mm x 610mm)	506 (0.326)	1.9 (0.131)	10.0 (0.689)	6.8 (0.469)	10.0 (0.689)	6.8 (0.469)	10.0 (0.689)
18" x 35" (457mm x 889mm)	552 (0.356)	1.9 (0.131)	10.0 (0.689)	6.5 (0.448)	10.0 (0.689)	6.5 (0.448)	10.0 (0.689)
18" x 36" (457mm x 914mm)	569 (0.367)	1.9 (0.131)	10.0 (0.689)	6.5 (0.448)	10.0 (0.689)	6.5 (0.448)	10.0 (0.689)
20.5" x 32.3" (520mm x 820mm)	584 (0.376)	1.9 (0.131)	10.0 (0.689)	6.5 (0.448)	10.0 (0.689)	6.5 (0.448)	10.0 (0.689)
18" x 37-3/4" (457mm x 959mm)	598 (0.385)	1.9 (0.131)	10.0 (0.689)	6.5 (0.448)	10.0 (0.689)	6.5 (0.448)	10.0 (0.689)
24" x 30" (610mm x 762mm)	641 (0.413)	1.9 (0.131)	10.0 (0.689)	6.2 (0.427)	10.0 (0.689)	6.2 (0.427)	10.0 (0.689)
27" x 27.5" (686mm x 699mm)	663 (0.427)	1.9 (0.131)	10.0 (0.689)	6.2 (0.427)	10.0 (0.689)	6.2 (0.427)	10.0 (0.689)
27.6" x 27.6" (700mm x 700mm)	679 (0.438)	1.8 (0.124)	10.0 (0.689)	6.2 (0.427)	10.0 (0.689)	6.2 (0.427)	10.0 (0.689)
23.1" x 36.2" (586mm x 920mm)	748 (0.483)	1.8 (0.124)	10.0 (0.689)	5.6 (0.386)	10.0 (0.689)	5.6 (0.386)	10.0 (0.689)

SIZE INCHES (mm)	RELIEF AREA in <sup>2</sup> (m <sup>2</sup> )	RUPTURE PRESSURES AVAILABLE		RELIEF AREA in <sup>2</sup> (m <sup>2</sup> )	SIZE INCHES (mm)	ALUMINUM SEAL PSIG @ 72° F MIN (bar)	ALUMINUM SEAL PSIG @ 72° F MAX (bar)
		TEFLON SEAL PSIG @ 72° F MIN (bar)	TEFLON SEAL PSIG @ 72° F MAX (bar)				
24" x 36" (610mm x 914mm)	776 (0.500)	1.8 (0.124)	10.0 (0.689)	5.6 (0.386)	10.0 (0.689)	5.6 (0.386)	10.0 (0.689)
30" x 30" (762mm x 762mm)	812 (0.524)	1.8 (0.124)	10.0 (0.689)	5.5 (0.379)	10.0 (0.689)	5.5 (0.379)	10.0 (0.689)
20.5" x 44" (521mm x 1118mm)	807 (0.521)	1.8 (0.124)	10.0 (0.689)	5.5 (0.379)	10.0 (0.689)	5.5 (0.379)	10.0 (0.689)
20" x 48" (508mm x 1219mm)	860 (0.555)	1.8 (0.124)	10.0 (0.689)	5.4 (0.372)	10.0 (0.689)	5.4 (0.372)	10.0 (0.689)
27" x 36" (686mm x 914mm)	879 (0.567)	1.8 (0.124)	10.0 (0.689)	5.3 (0.365)	10.0 (0.689)	5.3 (0.365)	10.0 (0.689)
25" x 40" (635mm x 1016mm)	904 (0.583)	1.8 (0.124)	10.0 (0.689)	5.2 (0.359)	10.0 (0.689)	5.2 (0.359)	10.0 (0.689)
27" x 39" (686mm x 991mm)	956 (0.616)	1.8 (0.124)	9.6 (0.662)	5.1 (0.352)	9.6 (0.662)	5.1 (0.352)	9.6 (0.662)
24" x 44" (610mm x 1118mm)	956 (0.616)	1.8 (0.124)	9.6 (0.662)	5.1 (0.352)	9.6 (0.662)	5.1 (0.352)	9.6 (0.662)
25" x 43" (635mm x 1092mm)	975 (0.629)	1.8 (0.124)	9.5 (0.655)	5.0 (0.345)	9.5 (0.655)	5.0 (0.345)	9.5 (0.655)
27" x 40" (686mm x 1016mm)	981 (0.633)	1.8 (0.124)	9.5 (0.655)	5.0 (0.345)	9.5 (0.655)	5.0 (0.345)	9.5 (0.655)
30" x 36" (762mm x 914mm)	983 (0.634)	1.8 (0.124)	9.5 (0.655)	5.0 (0.345)	9.5 (0.655)	5.0 (0.345)	9.5 (0.655)
25.5" x 43.1" (648mm x 1096mm)	1000 (0.645)	1.7 (0.117)	9.5 (0.655)	5.0 (0.345)	9.5 (0.655)	5.0 (0.345)	9.5 (0.655)
24" x 47" (610mm x 1194mm)	1023 (0.660)	1.7 (0.117)	9.2 (0.634)	4.9 (0.338)	9.2 (0.634)	4.9 (0.338)	9.2 (0.634)
24" x 48" (610mm x 1219mm)	1046 (0.675)	1.7 (0.117)	9.1 (0.627)	4.8 (0.331)	9.1 (0.627)	4.8 (0.331)	9.1 (0.627)
27" x 43" (686mm x 1092mm)	1058 (0.682)	1.7 (0.117)	9.1 (0.627)	4.8 (0.331)	9.1 (0.627)	4.8 (0.331)	9.1 (0.627)
25" x 47" (635mm x 1194mm)	1069 (0.689)	1.7 (0.117)	9.1 (0.627)	4.8 (0.331)	9.1 (0.627)	4.8 (0.331)	9.1 (0.627)
27.5" x 44.3" (698mm x 1126mm)	1112 (0.717)	1.7 (0.117)	9.1 (0.627)	4.8 (0.331)	9.1 (0.627)	4.8 (0.331)	9.1 (0.627)
25" x 49" (635mm x 1245mm)	1116 (0.720)	1.7 (0.117)	9.1 (0.627)	4.8 (0.331)	9.1 (0.627)	4.8 (0.331)	9.1 (0.627)
31.5" x 39.4" (800mm x 1000mm)	1135 (0.732)	1.7 (0.117)	9.1 (0.627)	4.8 (0.331)	9.1 (0.627)	4.8 (0.331)	9.1 (0.627)
36" x 36" (914mm x 914mm)	1190 (0.767)	1.7 (0.117)	8.6 (0.593)	4.7 (0.324)	8.6 (0.593)	4.7 (0.324)	8.6 (0.593)
30" x 44" (762mm x 1118mm)	1211 (0.781)	1.7 (0.117)	8.6 (0.593)	4.7 (0.324)	8.6 (0.593)	4.7 (0.324)	8.6 (0.593)
27" x 52" (686mm x 1321mm)	1287 (0.830)	1.7 (0.117)	8.4 (0.579)	4.6 (0.317)	8.4 (0.579)	4.6 (0.317)	8.4 (0.579)

SIZE INCHES (mm)	RELIEF AREA in <sup>2</sup> (m <sup>2</sup> )	RUPTURE PRESSURES AVAILABLE		RELIEF AREA in <sup>2</sup> (m <sup>2</sup> )	SIZE INCHES (mm)	ALUMINUM SEAL PSIG @ 72° F MIN (bar)	ALUMINUM SEAL PSIG @ 72° F MAX (bar)
		TEFLON SEAL PSIG @ 72° F MIN (bar)	TEFLON SEAL PSIG @ 72° F MAX (bar)				
27.5" x 51.6" (698mm x 1310mm)	1300 (0.839)	1.7 (0.117)	8.4 (0.579)	4.6 (0.317)	8.4 (0.579)	4.6 (0.317)	8.4 (0.579)
30" x 48" (762mm x 1219mm)	1325 (0.855)	1.7 (0.117)	8.4 (0.579)	4.6 (0.317)	8.4 (0.579)	4.6 (0.317)	8.4 (0.579)
36" x 38" (965mm x 965mm)	1332 (0.859)	1.7 (0.117)	8.4 (0.579)	4.6 (0.317)	8.4 (0.579)	4.6 (0.317)	8.4 (0.579)
25.5" x 57.1" (648mm x 1450mm)	1334 (0.904)	1.7 (0.117)	8.4 (0.579)	4.6 (0.317)	8.4 (0.579)	4.6 (0.317)	8.4 (0.579)
31.5" x 47.2" (800mm x 1200mm)	1372 (0.885)	1.7 (0.117)	8.3 (0.572)	4.6 (0.317)	8.3 (0.572)	4.6 (0.317)	8.3 (0.572)
39.4" x 39.4" (1000mm x 1000mm)	1434 (0.925)	1.6 (0.110)	8.3 (0.572)	4.5 (0.310)	8.3 (0.572)	4.5 (0.310)	8.3 (0.572)
27" x 58" (686mm x 1473mm)	1440 (0.929)	1.6 (0.110)	8.2 (0.565)	4.4 (0.303)	8.2 (0.565)	4.4 (0.303)	8.2 (0.565)
27.5" x 57.1" (698mm x 1450mm)	1444 (0.931)	1.6 (0.110)	7.9 (0.545)	4.4 (0.303)	7.9 (0.545)	4.4 (0.303)	7.9 (0.545)
36" x 44" (914mm x 1118mm)	1466 (0.946)	1.6 (0.110)	7.9 (0.545)	4.4 (0.303)	7.9 (0.545)	4.4 (0.303)	7.9 (0.545)
25" x 66" (635mm x 1676mm)	1515 (0.977)	1.6 (0.110)	7.8 (0.538)	4.3 (0.296)	7.8 (0.538)	4.3 (0.296)	7.8 (0.538)
27" x 66" (686mm x 1676mm)	1644 (1.061)	1.6 (0.110)	7.4 (0.510)	4.2 (0.290)	7.4 (0.510)	4.2 (0.290)	7.4 (0.510)
36.2" x 49.4" (920mm x 1254mm)	1662 (1.072)	1.6 (0.110)	7.4 (0.510)	4.2 (0.290)	7.4 (0.510)	4.2 (0.290)	7.4 (0.510)
30" x 60" (762mm x 1524mm)	1667 (1.075)	1.6 (0.110)	7.4 (0.510)	4.2 (0.290)	7.4 (0.510)	4.2 (0.290)	7.4 (0.510)
42" x 44" (1067mm x 1118mm)	1721 (1.110)	1.6 (0.110)	7.4 (0.510)	4.1 (0.283)	7.4 (0.510)	4.1 (0.283)	7.4 (0.510)
44" x 44" (1118mm x 1118mm)	1806 (1.165)	1.5 (0.103)	7.2 (0.496)	4.1 (0.283)	7.2 (0.496)	4.1 (0.283)	7.2 (0.496)
44.5" x 44.5" (1130mm x 1130mm)	1849 (1.196)	1.5 (0.103)	7.1 (0.490)	4.0 (0.276)	7.1 (0.490)	4.0 (0.276)	7.1 (0.490)
36" x 60" (914mm x 1524mm)	2018 (1.302)	1.5 (0.103)	7.0 (0.483)	4.0 (0.276)	7.0 (0.483)	4.0 (0.276)	7.0 (0.483)
39" x 66.5" (990mm x 1690mm)	2437 (1.572)	1.4 (0.097)	6.4 (0.441)	3.8 (0.262)	6.4 (0.441)	3.8 (0.262)	6.4 (0.441)
44" x 60" (1118mm x 1524mm)	2486 (1.604)	1.4 (0.097)	6.4 (0.441)	3.8 (0.262)	6.4 (0.441)	3.8 (0.262)	6.4 (0.441)
42" x 65" (1067mm x 1651mm)	2571 (1.659)	1.4 (0.097)	6.3 (0.434)	3.8 (0.262)	6.3 (0.434)	3.8 (0.262)	6.3 (0.434)
44" x 69" (1118mm x 1753mm)	2868 (1.850)	1.3 (0.090)	6.1 (0.421)	3.7 (0.255)	6.1 (0.421)	3.7 (0.255)	6.1 (0.421)

For Sizes Or Pressures Not Listed, Please Consult Factory

# CRP Rupture Panels

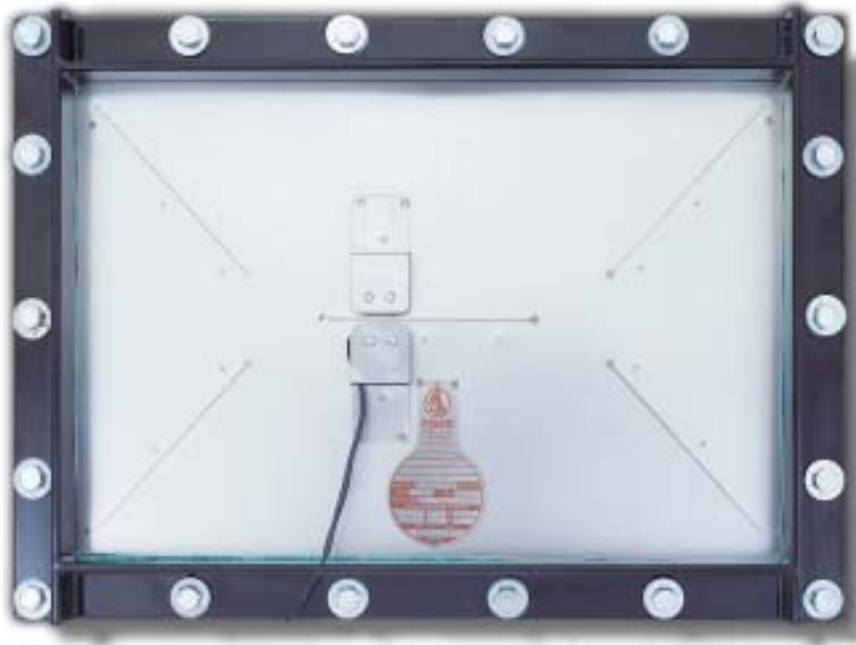
The OSECO CRP Rupture Panel is a light weight rupture panel design. It's superior opening characteristics provide maximum relief area.

The "four-petal" opening gives you a complete opening and instantaneous relief for deflagrations that occur in mere milliseconds.

The CRP design allows for use in a variety of applications such as grain dust, plastic powder residue or dust accumulation from any process. The NFPA 68 & 61 guidelines were taken into consideration in the design and development of the CRP.

Since 1982, the CRP has been instrumental in the protection of personnel and equipment. The design allows for complete relief area and minimal, if any, fragmentation. When used with the SVT-03 sensor it can be relied upon to provide the best method of explosion venting and protection.

OSECO's in-house laser provides for complete reliability, repeatability and dependability of the CRP. Don't settle for an unknown, ask for the OSECO CRP and get the quality you expect and deserve.



\*Shown w/optional SVT-03 Alarm Sensor

Recommended maximum ratio of system operating pressure to rated rupture pressure is:

- 50% for Flat Panels

Rupture Tolerances:

- $\pm 1/2$  PSI for Panels Rated Above 2 psig.
- $\pm 1/4$  PSI for Panels Rated 2 psig or Less.



# CRP RUPTURE PANEL SPECIFICATIONS

SIZE INCHES (mm)	RELIEF AREA in <sup>2</sup> (m <sup>2</sup> )	RUPTURE PRESSURES AVAILABLE			
		TEFLON SEAL PSIG @ 72° F		ALUMINUM SEAL PSIG @ 72° F	
		MIN (bar)	MAX (bar)	MIN (bar)	MAX (bar)
8" x 8" (203mm x 203mm)	64 (0.041)	1.5 (0.103)	10.0 (0.689)	N/A	N/A
9" x 12" (229mm x 305mm)	108 (0.069)	1.4 (0.097)	10.0 (0.689)	N/A	N/A
12" x 12" (305mm x 305mm)	144 (0.092)	1.4 (0.097)	10.0 (0.689)	N/A	N/A
12" x 18" (305mm x 457mm)	216 (0.139)	1.3 (0.090)	10.0 (0.689)	N/A	N/A
12" x 24" (305mm x 610mm)	288 (0.185)	1.3 (0.090)	10.0 (0.689)	N/A	N/A
16" x 18" (406mm x 457mm)	288 (0.185)	1.3 (0.090)	10.0 (0.689)	N/A	N/A
17-1/8" x 17 1/8" (435mm x 435mm)	293 (0.189)	1.3 (0.090)	10.0 (0.689)	N/A	N/A
13.9" x 22.8" (354mm x 580mm)	318 (0.205)	1.25 (0.103)	10.0 (0.689)	N/A	N/A
19.7" x 19.7" (500mm x 500mm)	387 (0.230)	1.25 (0.086)	10.0 (0.689)	6.6 (0.455)	10.0 (0.689)
18" x 24" (457mm x 610mm)	432 (0.278)	1.2 (0.083)	10.0 (0.689)	6.6 (0.455)	10.0 (0.689)
20" x 24" (508mm x 610mm)	480 (0.309)	1.2 (0.083)	10.0 (0.689)	6.4 (0.441)	10.0 (0.689)
18" x 28" (457mm x 711mm)	504 (0.325)	1.2 (0.083)	10.0 (0.689)	6.2 (0.427)	10.0 (0.689)
18" x 30" (457mm x 762mm)	540 (0.348)	1.2 (0.083)	10.0 (0.689)	6.0 (0.414)	10.0 (0.689)
24" x 24" (610mm x 610mm)	576 (0.371)	1.2 (0.083)	10.0 (0.689)	5.8 (0.400)	10.0 (0.689)
18" x 35" (457mm x 889mm)	630 (0.406)	1.2 (0.083)	10.0 (0.689)	5.5 (0.379)	10.0 (0.689)
18" x 36" (457mm x 914mm)	648 (0.418)	1.2 (0.083)	10.0 (0.689)	5.5 (0.379)	10.0 (0.689)
20.5" x 32.3" (520mm x 820mm)	660 (0.426)	1.2 (0.083)	10.0 (0.689)	5.5 (0.379)	10.0 (0.689)
18" x 37-3/4" (457mm x 959mm)	679 (0.438)	1.2 (0.083)	10.0 (0.689)	5.5 (0.379)	10.0 (0.689)
24" x 30" (610mm x 762mm)	720 (0.464)	1.1 (0.076)	10.0 (0.689)	5.2 (0.356)	10.0 (0.689)
27" x 27.5" (686mm x 699mm)	742 (0.479)	1.1 (0.076)	10.0 (0.689)	5.2 (0.356)	10.0 (0.689)
27.6" x 27.6" (700mm x 700mm)	759 (0.490)	1.1 (0.076)	10.0 (0.689)	5.2 (0.356)	10.0 (0.689)
23.1" x 36.2" (586mm x 920mm)	835 (0.539)	1.1 (0.076)	10.0 (0.689)	5.2 (0.356)	10.0 (0.689)

SIZE INCHES (mm)	RELIEF AREA in <sup>2</sup> (m <sup>2</sup> )	RUPTURE PRESSURES AVAILABLE			
		TEFLON SEAL PSIG @ 72° F		ALUMINUM SEAL PSIG @ 72° F	
		MIN (bar)	MAX (bar)	MIN (bar)	MAX (bar)
24" x 36" (610mm x 914mm)	864 (0.557)	1.0 (0.069)	10.0 (0.689)	4.6 (0.317)	10.0 (0.689)
30" x 30" (762mm x 762mm)	900 (0.580)	1.0 (0.069)	10.0 (0.689)	4.5 (0.310)	10.0 (0.689)
20.5" x 44" (521mm x 1118mm)	902 (0.581)	1.0 (0.069)	10.0 (0.689)	4.5 (0.310)	10.0 (0.689)
20" x 48" (508mm x 1219mm)	960 (0.619)	1.0 (0.069)	10.0 (0.689)	4.4 (0.303)	10.0 (0.689)
27" x 36" (686mm x 914mm)	972 (0.627)	1.0 (0.069)	10.0 (0.689)	4.3 (0.296)	10.0 (0.689)
25" x 40" (635mm x 1016mm)	1000 (0.645)	1.0 (0.069)	10.0 (0.689)	4.2 (0.290)	10.0 (0.689)
27" x 39" (686mm x 991mm)	1053 (0.679)	1.0 (0.069)	9.6 (0.662)	4.1 (0.283)	9.6 (0.662)
24" x 44" (610mm x 1118mm)	1056 (0.681)	1.0 (0.069)	9.6 (0.662)	4.1 (0.283)	9.6 (0.662)
25" x 43" (635mm x 1092mm)	1075 (0.683)	1.0 (0.069)	9.5 (0.655)	4.0 (0.276)	9.5 (0.655)
27" x 40" (686mm x 1016mm)	1080 (0.686)	1.0 (0.069)	9.5 (0.655)	4.0 (0.276)	9.5 (0.655)
30" x 36" (762mm x 914mm)	1080 (0.686)	1.0 (0.069)	9.5 (0.655)	4.0 (0.276)	9.5 (0.655)
25.5" x 43.1" (648mm x 1096mm)	1100 (0.710)	1.0 (0.069)	9.5 (0.655)	4.0 (0.276)	9.5 (0.655)
24" x 47" (610mm x 1194mm)	1128 (0.727)	1.0 (0.069)	9.2 (0.634)	3.9 (0.269)	9.2 (0.634)
24" x 48" (610mm x 1219mm)	1152 (0.743)	0.9 (0.062)	9.1 (0.627)	3.8 (0.262)	9.1 (0.627)
27" x 43" (686mm x 1092mm)	1161 (0.749)	0.9 (0.062)	9.1 (0.627)	3.8 (0.262)	9.1 (0.627)
25" x 47" (635mm x 1194mm)	1175 (0.758)	0.9 (0.062)	9.1 (0.627)	3.8 (0.262)	9.1 (0.627)
27.5" x 44.3" (699mm x 1126mm)	1218 (0.785)	0.9 (0.062)	9.1 (0.627)	3.8 (0.262)	9.1 (0.627)
25" x 49" (635mm x 1245mm)	1225 (0.790)	0.9 (0.062)	9.1 (0.627)	3.8 (0.262)	9.1 (0.627)
31.5" x 39.4" (800mm x 1000mm)	1240 (0.800)	0.9 (0.062)	9.1 (0.627)	3.8 (0.262)	9.1 (0.627)
36" x 36" (914mm x 914mm)	1296 (0.836)	0.8 (0.055)	8.6 (0.593)	3.7 (0.255)	8.6 (0.593)
30" x 44" (762mm x 1118mm)	1320 (0.851)	0.8 (0.055)	8.6 (0.593)	3.7 (0.255)	8.6 (0.593)
27" x 52" (686mm x 1321mm)	1404 (0.905)	0.7 (0.048)	8.4 (0.579)	3.5 (0.241)	8.4 (0.579)

SIZE INCHES (mm)	RELIEF AREA in <sup>2</sup> (m <sup>2</sup> )	RUPTURE PRESSURES AVAILABLE			
		TEFLON SEAL PSIG @ 72° F		ALUMINUM SEAL PSIG @ 72° F	
		MIN (bar)	MAX (bar)	MIN (bar)	MAX (bar)
27.5" x 51.6" (698mm x 1310mm)	1417 (0.914)	0.7 (0.048)	8.4 (0.579)	3.5 (0.241)	8.4 (0.579)
30" x 48" (762mm x 1219mm)	1440 (0.929)	0.7 (0.048)	8.4 (0.579)	3.5 (0.241)	8.4 (0.579)
36" x 38" (914mm x 965mm)	1444 (0.931)	0.7 (0.048)	8.4 (0.579)	3.5 (0.241)	8.4 (0.579)
25.5" x 57.1" (648mm x 1450mm)	1456 (0.939)	0.7 (0.048)	8.4 (0.579)	3.5 (0.241)	8.4 (0.579)
31.5" x 47.2" (800mm x 1200mm)	1488 (0.960)	0.7 (0.048)	8.3 (0.572)	3.5 (0.241)	8.3 (0.572)
39.4" x 39.4" (1000mm x 1000mm)	1550 (1.000)	0.7 (0.048)	8.3 (0.572)	3.5 (0.241)	8.3 (0.572)
27" x 58" (686mm x 1473mm)	1566 (1.010)	0.7 (0.048)	8.2 (0.565)	3.5 (0.241)	8.2 (0.572)
27.5" x 57.1" (698mm x 1450mm)	1568 (1.012)	0.7 (0.048)	7.9 (0.545)	3.4 (0.234)	7.9 (0.545)
36" x 44" (914mm x 1118mm)	1584 (1.021)	0.7 (0.048)	7.9 (0.545)	3.4 (0.234)	7.9 (0.545)
25" x 66" (635mm x 1676mm)	1650 (1.064)	0.6 (0.041)	7.8 (0.538)	3.3 (0.228)	7.8 (0.538)
27" x 66" (686mm x 1676mm)	1782 (1.149)	0.5 (0.034)	7.4 (0.510)	3.2 (0.221)	7.4 (0.510)
36.2" x 49.4" (920mm x 1254mm)	1788 (1.153)	0.5 (0.034)	7.4 (0.510)	3.2 (0.221)	7.4 (0.510)
30" x 60" (762mm x 1524mm)	1800 (1.161)	0.5 (0.034)	7.4 (0.510)	3.2 (0.221)	7.4 (0.510)
42" x 44" (1067mm x 1118mm)	1848 (1.192)	0.5 (0.034)	7.4 (0.510)	3.1 (0.214)	7.4 (0.510)
44" x 44" (1118mm x 1118mm)	1936 (1.249)	0.5 (0.034)	7.2 (0.496)	3.1 (0.214)	7.2 (0.496)
44.5" x 44.5" (1130mm x 1130mm)	1980 (1.277)	0.5 (0.034)	7.1 (0.490)	3.0 (0.207)	7.1 (0.490)
36" x 60" (914mm x 1524mm)	2160 (1.393)	0.5 (0.034)	7.0 (0.483)	3.0 (0.207)	7.0 (0.483)
39" x 66.5" (990mm x 1690mm)	2593 (1.673)	0.3 (0.021)	6.4 (0.441)	2.8 (0.193)	6.4 (0.441)
44" x 60" (1118mm x 1524mm)	2640 (1.703)	0.3 (0.021)	6.4 (0.441)	2.8 (0.193)	6.4 (0.441)
42" x 65" (1067mm x 1651mm)	2730 (1.761)	0.3 (0.021)	6.3 (0.434)	2.8 (0.193)	6.3 (0.434)
44" x 69" (1118mm x 1753mm)	3036 (1.958)	0.2 (0.014)	6.1 (0.421)	2.7 (0.186)	6.1 (0.421)

**For Sizes Or Pressures Not Listed, Please Consult Factory**

# RND Rupture Panels

For those applications requiring a round rupture panel, OSECO is pleased to offer the Model RND Rupture Panel. The same advanced technology and superior manufacturing capabilities utilized in our square and rectangular rupture panels are incorporated in the production of the RND rupture panel.

Utilizing our in-house laser and specially designed hydraulic presses, OSECO has dedicated an entire manufacturing facility solely for the development and manufacture of rupture panels.



## RND RUPTURE PANEL SPECIFICATIONS

SIZE INCHES (mm)	STANDARD ANGLE FRAME I.D.	RELIEF AREA in <sup>2</sup> (m <sup>2</sup> )	RUPTURE PRESSURES AVAILABLE			
			TEFLON SEAL PSIG @ 72° F		ALUMINUM SEAL PSIG @ 72° F	
			MIN (bar)	MAX (bar)	MIN (bar)	MAX (bar)
8" (200mm)	8.125" (206mm)	41 (0.026)	3.0 (0.207)	10.0 (0.689)	N/A	N/A
10" (250mm)	10.125" (257mm)	64 (0.041)	2.5 (0.172)	10.0 (0.689)	N/A	N/A
12" (300mm)	12.1875" (310mm)	94 (0.060)	2.0 (0.138)	10.0 (0.689)	N/A	N/A
14" (350mm)	14.1875" (360mm)	128 (0.082)	1.5 (0.103)	10.0 (0.689)	N/A	N/A
16" (400mm)	16.25" (413mm)	167 (0.107)	1.25 (0.086)	10.0 (0.689)	N/A	N/A
18" (450mm)	18.25" (464mm)	213 (0.137)	1.0 (0.069)	10.0 (0.689)	N/A	N/A
20" (500mm)	20.25" (514mm)	262 (0.169)	1.0 (0.069)	10.0 (0.689)	N/A	N/A
24" (600mm)	24.25" (616mm)	377 (0.243)	1.0 (0.069)	10.0 (0.689)	6.7 (0.462)	10.0 (0.689)
28" (700mm)	28.25" (718mm)	512 (0.330)	0.8 (0.055)	10.0 (0.689)	5.7 (0.393)	10.0 (0.689)
30" (750mm)	30.25" (768mm)	588 (0.379)	0.5 (0.034)	10.0 (0.689)	5.2 (0.359)	10.0 (0.689)
32" (800mm)	32.25" (819mm)	667 (0.430)	0.5 (0.034)	10.0 (0.689)	4.8 (0.331)	10.0 (0.689)
34" (850mm)	34.25" (870mm)	755 (0.487)	0.5 (0.034)	10.0 (0.689)	4.4 (0.303)	10.0 (0.689)
36" (900mm)	36.25" (921mm)	840 (0.541)	0.5 (0.034)	9.7 (0.669)	4.1 (0.283)	9.7 (0.669)
40" (1000mm)	40.25" (1022mm)	1039 (0.670)	0.5 (0.034)	8.6 (0.593)	3.8 (0.262)	8.6 (0.593)
42" (1050mm)	42.25" (1073mm)	1151 (0.742)	0.5 (0.034)	8.4 (0.579)	3.6 (0.248)	8.4 (0.579)

Recommended maximum ratio of system operating pressure to rated rupture pressure is:

- 50% for Flat Panels

Rupture Tolerances:

- ± 1/2 PSI for Panels Rated Above 2 psig.
- ± 1/4 PSI for Panels Rated 2 psig or Less.



*For Sizes Or Pressures Not Listed,  
Please Consult Factory*

# RNDC Rupture Panels

OSECO's Model RNDC Rupture Panel is a domed, round design that withstands higher positive or negative system operating pressures than flat panel designs. Panel frame vacuum support bars that may restrict flow are not required. The RNDC is well suited for high cycling service.

Utilizing our in-house laser and specially designed hydraulic presses, OSECO has dedicated an entire manufacturing facility solely for the development and manufacture of rupture panels.

Should your application require an advanced crowned (RNDC) rupture panel, let OSECO meet your needs.



Recommended maximum ratio of system operating pressure to rated rupture pressure is:

- 70% for Crowned Panels

Rupture Tolerances:

- $\pm 1/2$  PSI for Panels Rated Above 2 psig.
- $\pm 1/4$  PSI for Panels Rated 2 psig or Less.



## RNDC RUPTURE PANEL SPECIFICATIONS

SIZE INCHES (mm)	STANDARD ANGLE FRAME I.D.	RELIEF AREA in <sup>2</sup> (m <sup>2</sup> )	RUPTURE PRESSURES AVAILABLE			
			TEFLON SEAL PSIG @ 72° F		ALUMINUM SEAL PSIG @ 72° F	
			MIN (bar)	MAX (bar)	MIN (bar)	MAX (bar)
8" (200mm)	8.125" (206mm)	45 (0.029)	4.5 (0.310)	10.0 (0.689)	N/A	N/A
10" (250mm)	10.125" (257mm)	72 (0.046)	3.6 (0.248)	10.0 (0.689)	N/A	N/A
12" (300mm)	12.1875" (310mm)	101 (0.065)	3.0 (0.207)	10.0 (0.689)	N/A	N/A
14" (350mm)	14.1875" (360mm)	135 (0.087)	2.6 (0.179)	10.0 (0.689)	N/A	N/A
16" (400mm)	16.25" (413mm)	176 (0.113)	2.3 (0.159)	10.0 (0.689)	N/A	N/A
18" (450mm)	18.25" (464mm)	227 (0.146)	2.0 (0.138)	10.0 (0.689)	N/A	N/A
20" (500mm)	20.25" (514mm)	279 (0.180)	1.8 (0.124)	10.0 (0.689)	N/A	N/A
24" (600mm)	24.25" (616mm)	415 (0.267)	1.5 (0.103)	10.0 (0.689)	7.7 (0.531)	10.0 (0.689)
28" (700mm)	28.25" (718mm)	530 (0.342)	1.5 (0.103)	10.0 (0.689)	6.7 (0.462)	10.0 (0.689)
30" (750mm)	30.25" (768mm)	650 (0.419)	1.5 (0.103)	10.0 (0.689)	6.2 (0.427)	10.0 (0.689)
32" (800mm)	32.25" (819mm)	754 (0.486)	1.5 (0.103)	10.0 (0.689)	5.8 (0.400)	10.0 (0.689)
34" (850mm)	34.25" (870mm)	855 (0.551)	1.5 (0.103)	10.0 (0.689)	5.4 (0.372)	10.0 (0.689)
36" (900mm)	36.25" (921mm)	955 (0.616)	1.5 (0.103)	9.7 (0.669)	5.1 (0.352)	9.7 (0.669)

*For Sizes Or Pressures Not Listed, Please Consult Factory*

# The OSECO Advantage...

## DELIVERY

Orders for most custom-made products are shipped from Oseco within three weeks of receiving the order. Oseco utilizes its own in-house laser, which allows us to provide reduced delivery times for emergency orders. In most cases, **same-day** service is available!

## QUALITY

Only Oseco utilizes single-craftsperson responsibility: Our pride is assured by the maker's signature on each and every order. This, coupled with a quality control program that exceeds the requirements of ISO 9001, assures you that we have supplied you the highest-quality product.

## COMPETITIVE PRICING

Oseco's products are the highest-quality industry-wide. They are offered at very competitive pricing and with the fastest delivery available.

## BEST OVERALL SERVICE

Our goal at Oseco is to provide you, the customer, with the best delivery, quality, and overall performance for your rupture disk needs.

Let us prove our commitment to this goal—contact your local Oseco representative and ask us for a Rupture Disk Review. Your representative and a factory technician will review all of your rupture disk applications, suggest changes where applicable, and provide you with a competitive quotation guaranteed to save you money, at no charge.

## OSECO WILL PROVIDE YOU WITH WHAT YOU NEED MOST...VALUE! ®

Visit the Oseco web site at [www.oseco.com](http://www.oseco.com), write us at [info@oseco.com](mailto:info@oseco.com), or call Oseco toll-free at **1.800.395.disk** for more information or to receive your free Rupture Disk Review.



# OSECO

A handwritten signature in blue ink that reads "Joe Ragosta".

Joseph M. Ragosta  
President, Oseco

*20th Anniversary 1981-2001*

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