

# PRODUCT INFORMATION

## EXPLOSION VENTING

# EX-GO-VENT



REMBE®, INC.

## Rectangular Single Layer Burst Panel ...for Explosion Venting at Low Vacuum

In plants that produce organic products, considerable volumes of fine dust are always present. At the start of a process it may be the case that this fine dust is only com-bustible. However, enriched with oxygen, this combustible material transforms into a highly explosive mixture. If an ignition source is then introduced, resulting in an explosion and fire, this will cause enormous consequential damage for plant and personnel. According to ATEX directive 94/9/EG and NFPA standards, manufacturers are obliged to reduce the risk of a dust explosion.

Explosion protection with certified explosion panels provides a cost effective and well-engineered solution. So, for example, if a dust explosion occurs, the explosion pressure is reduced to a harmless level within the plant. The EX-GO-VENT incorporates bionic structures and guarantees extraordinary stability suitable for most standard applications. The flat, single layer explosion panel has a perfect venting efficiency due to its low specific weight. Unlike other manufacturers options, the EX-GO-VENT is NOT torque dependent during installation. Typically, the EX-GO-VENT panel is mounted directly on roofs, bulkheads or round shaped equipment and provides a guaranteed leak-tight sealing against arduous weather conditions or other water ingress.



### Features

- Standard burst pressure  
pstat. = 0.1 barg @ 22 °C\*  
= 1.45 psig @ 71.6 °F\*
- Temperature from -40 °C up to 180 °C\*  
-40 ° F to 356 °F\*
- Material: 304 stainless steel, silicon gasket (FDA compliant)
- Customized shapes such as Triangular, Sail - or Trapezium shape, in order to utilize full capacity and optimize customer equipment configurations
- Mounting is achieved without using the usual counter frame
- Direct installation on plain walls as well as on cylindrical equipment, e. g. cyclones, filters, silos, etc.
- Elimination of dead-space and product accumulation, making it suitable for sterile applications, e. g. in food industry
- Mounting possible on cylindrical walls with diameter  $\geq$  3.5 m (9.8 ft)
- Round EX-GO-VENTs are also available

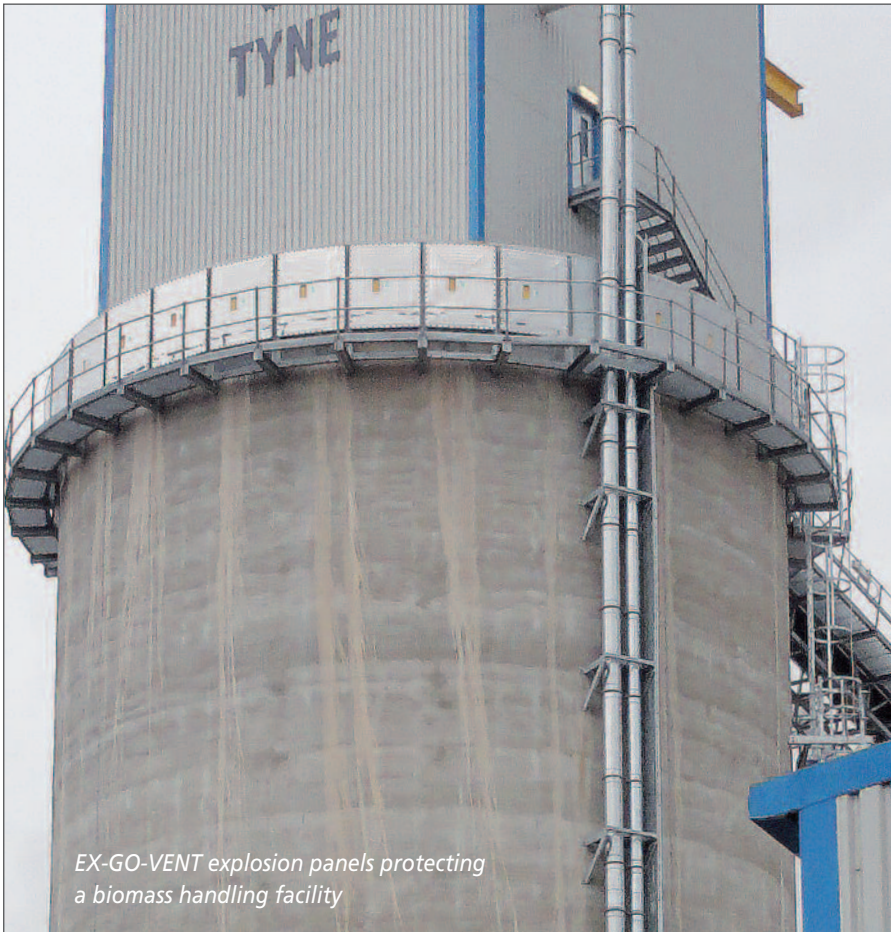
\* For non-standard operating conditions, such as higher operating pressure, vacuum, pulsation and/or temperature please contact [sales@rembe.us](mailto:sales@rembe.us) or call (704)716.7022 to discuss your requirements.



Filter system: Holtrop & Jansma, NL



Elevator with EX-GO-VENT panels



EX-GO-VENT explosion panels protecting a biomass handling facility

## Applications

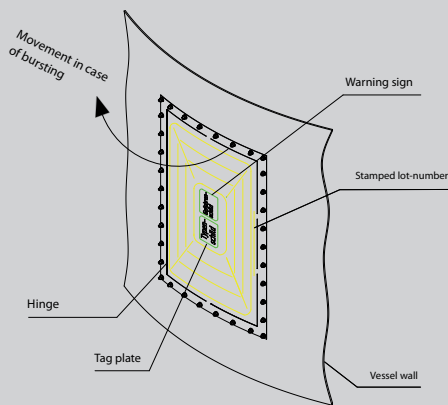
- Explosion venting of silos, filter, bucket elevators, cyclones, grinders and more

## Your benefits

- Perfect venting efficiency
- Sanitary installation
- Wide range of applications
- Easy and quick mounting
- Considerable cost savings due to integrated gasket and mounting frame



## EX-GO-VENT installation: quick and easy



## Quality and Certifications

### Certifications

- ATEX (BVS 03 ATEX ZQS/E210)
- KTA 1401 – Nuclear Power
- ESA - Aerospace
- CML
- ASME
- GOST
- Gospromnadzor
- KOSHA
- various international inspections

### All series

Certification in accordance with

- ATEX guideline 94/9 EG

Approval in accordance with ATEX certificate no.

- FSA 04 ATEX 1538 X

### Every batch

- Manufacture and certified in accordance with the requirements of EN14797
- Burst test certificates with each supply in accordance with EN10204-3.1

The REMBE® team provides total support in sizing your venting area requirements and recommending a cost effective solution suitable for your specific application(s). Sizing Calculations are made in accordance with VDI guideline 3673, HBG-BGI 739, EN14491, or NFPA 68. Contact us for more information.

Max. Dimensions of Wall Opening = Nominal Venting Dimensions		Single-Layer Explosion Vent <b>EX-GO-VENT</b> for low vacuum Effective Vent Area	
		[cm <sup>2</sup> ]	[sq in]
[mm]	[in]		
130 x 500	5.1 x 19.7		
229 x 305	9.0 x 12.0	700	108.5
150 x 600	5.9 x 23.6		
180 x 420	7.1 x 16.5	750	116.3
270 x 465	10.6 x 18.3		
200 x 460	7.9 x 18.1	920	142.6
247 x 465	9.7 x 18.3		
205 x 610	8.1 x 24.0	1250	193.8
340 x 385	13.4 x 15.2	1300	201.5
314 x 424	12.4 x 16.7		
305 x 457	12.0 x 18.0	1350	209.3
345 x 405	13.6 x 15.9		
315 x 467	12.4 x 18.4	1470	227.9
247 x 610	9.7 x 24.0	1500	232.5
330 x 470	13.0 x 18.5	1550	240.3
340 x 440	13.4 x 17.3		
400 x 400	15.7 x 15.7	1600	248.0
410 x 410	16.1 x 16.1	1680	260.4
404 x 420	15.9 x 16.5		
<b>305 x 610</b>	<b>12.0 x 24.0</b>	<b>1860</b>	<b>288.3</b>
354 x 580	13.9 x 22.8	2050	317.8
375 x 655	14.8 x 25.8		
440 x 605	17.3 x 23.8		
470 x 610	18.5 x 24.0	2850	441.8
<b>490 x 590</b>	<b>19.3 x 23.2</b>	<b>2890</b>	<b>448.0</b>
500 x 620	19.7 x 24.4		
300 x 1000	11.8 x 39.4	3000	465.0
386 x 920	15.2 x 36.2		
454 x 760	17.9 x 29.9	3400	527.0
570 x 620	22.4 x 24.4		
450 x 800	17.7 x 31.5		
600 x 600	23.6 x 23.6	3600	558.0
590 x 620	23.2 x 24.4		
605 x 605	23.8 x 23.8		
575 x 645	22.4 x 25.4		
610 x 610	24.0 x 24.0	3720	576.6
<b>457 x 890</b>	<b>18.0 x 35.0</b>	<b>4100</b>	<b>635.5</b>
650 x 650	25.6 x 25.6	4220	654.1
520 x 820	20.5 x 32.3	4260	660.3
370 x 1220	14.6 x 48.0	4500	697.5
653 x 653	25.7 x 25.7		
600 x 800	23.6 x 31.5		
710 x 710	28.0 x 28.0	5000	775.0
620 x 820	24.4 x 32.3	5100	790.5
<b>586 x 920</b>	<b>23.1 x 36.2</b>	<b>5400</b>	<b>837.0</b>
500 x 1100	19.7 x 43.3	5500	852.5
750 x 840	29.5 x 33.1		
620 x 1020	24.4 x 40.2	6320	979.6
800 x 800	31.5 x 31.5	6400	992.0
457 x 1500	18.0 x 59.1		
<b>610 x 1118</b>	<b>24.0 x 44.0</b>	<b>6800</b>	<b>1054.0</b>
645 x 1130	25.4 x 44.5		
720 x 1020	28.3 x 40.2		
760 x 1114	29.9 x 43.9	8450	1309.8
840 x 920	33.1 x 36.2		
<b>920 x 920</b>	<b>36.2 x 36.2</b>	<b>8500</b>	<b>1317.5</b>
457 x 2000	18.0 x 78.7		
920 x 1020	36.2 x 40.2		
586 x 1630	23.1 x 64.2		
1000 x 1000	39.4 x 39.4	10000	1550.0
<b>915 x 1118</b>	<b>36.0 x 44.0</b>	<b>10230</b>	<b>1585.7</b>
770 x 1340	30.3 x 52.8	10300	1596.5
1020 x 1020	40.2 x 40.2	10400	1612.0
790 x 1340	31.1 x 52.8	10500	1627.5
586 x 1893	23.1 x 74.5		
920 x 1254	36.2 x 49.4		
740 x 1630	29.1 x 64.2		
740 x 1893	29.1 x 74.5		
750 x 1900	29.5 x 74.8		
1130 x 1130	44.5 x 44.5	12750	1976.3
860 x 1520	33.9 x 59.8	13000	2015.0
940 x 1440	37.0 x 56.7	13500	2092.5
940 x 1600	37.0 x 63.0	15040	2331.2
1110 x 1460	43.7 x 57.5	16000	2480.0
920 x 1920	36.2 x 75.6	17500	2712.5
1000 x 2000	39.4 x 78.7	20000	3100.0

\* Standard burst pressure P<sub>stat</sub> = 0.1 barg @ 22° C (71.6 °F), further sizes, gasket materials, burst pressures, etc. on request.