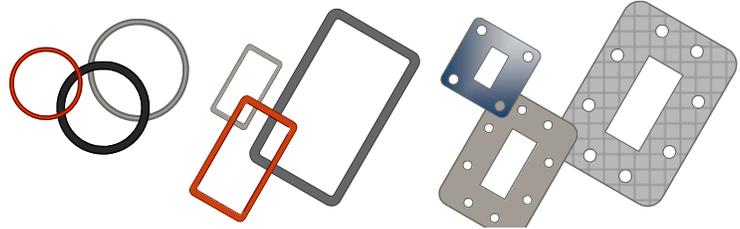


# tech notes

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## SELECTING WAVEGUIDE GASKETS - Made easy with the ATM GASKET Selection Aid

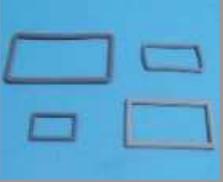
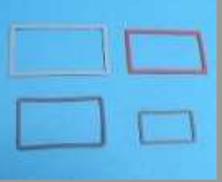
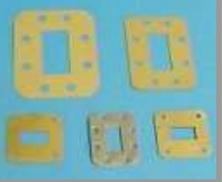
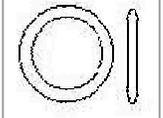
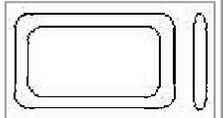
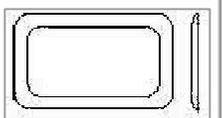
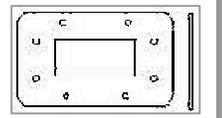
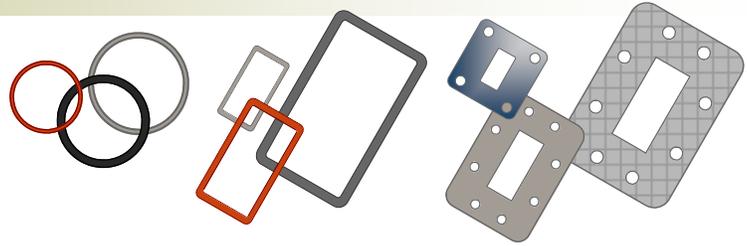
W/G Flange Gaskets & Hardware				
				
Includes gasket, screws, nuts,				
<b>Gasket Kit</b> Gasket & Flange Hardware available for all gasket types	<b>Gasket, Full</b> O-Ring type for U/G style Flanges	<b>Gasket, Full</b> for CPR style Flanges	<b>Gasket, Half</b> for CPR style Flanges	<b>Gasket, Die Cut</b> for Flat or Grooved Flanges

Image from ATM website... <http://www.atmmicrowave.com/wave-Hardware.html>

**How to select the correct gasket to join two waveguide flanges is one of the most frequently asked questions by customers. This is not surprising given the wide range of flanges and gaskets [sizes, shapes, conductive or non-conductive, etc.] that are available. In addition, there may be more than one Gasket type that can be used.**

**A few simple steps will help you to select the correct gasket type and ATM Model number....**

## SELECTING WAVEGUIDE GASKETS (cont'd)



### FUNCTION

What is the **FUNCTION** of the gasket in your application ...

**PRESSURE SEAL; or PRESSURE and RF SEAL ?**

- If a Pressure seal only, then use a **NON-CONDUCTIVE** Gasket.  
These are usually Silicon or Neoprene material, O-rings or Rectangles, designed to fit into flange grooves.
- If a Pressure and RF seal is required, then use a **CONDUCTIVE** Gasket.  
These look similar to the non-conductive gaskets, but are filled with a conductive material, usually copper or silver. The exception is the Die-cut Gasket, which resembles the flange face.

### FLANGE TYPES

What is the **waveguide size and Flange Types to be joined?**

- If you are not sure, see our website for flange types and drawings.  
<http://www.atmmicrowave.com/AtmFlanges.html>

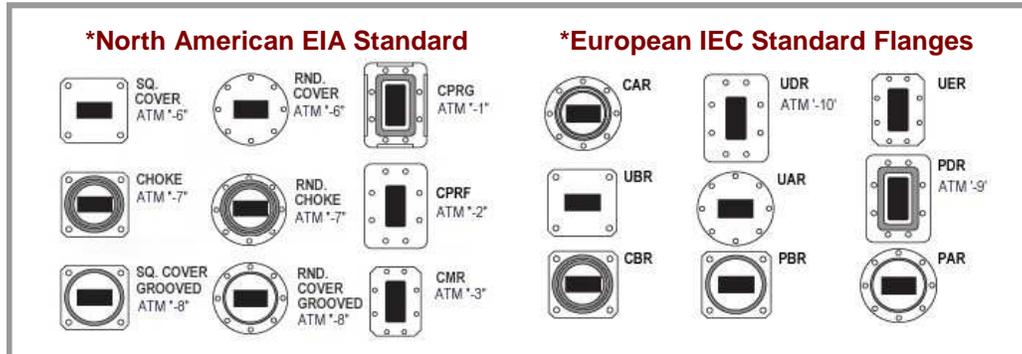


Image from ATM website... <http://www.atmmicrowave.com/AtmFlanges.html>

\* For a comparison of North American EIA flanges to European IEC flanges, go to  
[http://www.atmmicrowave.com/pdf-outlines/ATM\\_Std\\_Cvr\\_Flg\\_-\\_Tabulated.pdf](http://www.atmmicrowave.com/pdf-outlines/ATM_Std_Cvr_Flg_-_Tabulated.pdf)

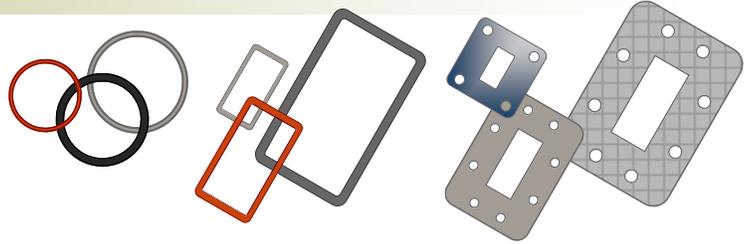
### FLANGE COMBINATIONS

Some flange types were designed to mate together, like a UG cover to a UG choke, and others were not (like a UG choke cannot mate to a UG Choke).

You must know your Waveguide size and Flange type.

Then, our ATM GASKET Selection Aid can help you select the right gasket for your flange combination.

## SELECTING WAVEGUIDE GASKETS (cont'd)



### ATM WAVEGUIDE GASKET SELECTION AID

Once you know:

- Waveguide size
- Type of flanges to be used
- Function: Pressure only [Non-Conductive] or Pressure and RF seal [Conductive]

Go to our website to access the *ATM WAVEGUIDE GASKET SELECTION AID* ...

[http://www.atmmicrowave.com/calc\\_wg\\_gasket\\_frame.html](http://www.atmmicrowave.com/calc_wg_gasket_frame.html)

Just enter the waveguide size and click the Lookup button.

The guide will show acceptable combinations of flanges and the correct ATM Model number of the gasket.

The website result for WR90 is shown below:

ATM Waveguide Gasket Type Selection Aid						
Specify WR Waveguide Size: i.e. Enter "90" for WR90			90	Lookup		
Gasket #		CPR Flange Combinations				
			CPRG/CPRG	CPRG/CPRF	CPRF/CPRF	
Gasket Type	Non-Conductive	Full	G90A1F *	N/A	N/A	
		Half	N/A	G90A1H *	N/A	
	Conductive	Die-Cut	G90B2D **	G90B2D **	G90B2D *	
		Full	G90B1F *	N/A	N/A	
		Half	N/A	G90B1H *	N/A	
Gasket #		UG Style Flange Combinations				
			Cover/Cover	Cover/Choke	Cover/Cover-Groove	Cover-Groove/Cover-Groove
Gasket Type	Non-Conductive	O-Ring		G90A7F *	G90A7F *	
		Die-Cut	G90B6D *			G90B6D *
	Conductive	O-Ring		G90B7F *	G90B7F *	
* Most Commonly Used Gaskets, ** These will work, but NOT commonly used.						

In the example above, if you want a gasket to provide both a Pressure *and* RF Seal for a WR90 Cover Flange to WR90 Choke Flange combination, then use a G90B7F gasket.

If you want a Gasket **Kit**, consisting of the selected gasket *and* matching hardware (screws, nuts, washers), just add a "K" after the "G" in the model number.... G**K**90B7F.