

Pressure window calculator

$$Th = \sqrt{\frac{1.1(P)(DIA)^2}{MR}}$$

- Th** = thickness, inches
DIA = unsupported diameter, inches
P = pressure difference, psi
MR = modulus of rupture, psi

Pressure at 1 atm = 14.7 psi = 101.324 kPa

Modulus of rupture (MR, psi) of commonly used IR Crystals:

BaF2	3,900
CaF2	5,300
ZnSe	8,000
Ge	10,500
Sapphire	65,000