

## SPACE GASS Input Guide

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With the increasing popularity of SPACE GASS with the engineering and planning community at large, Treadwell™ is aware that it essential to aid users and make usage of this multi-purpose 3D analysis and design program simpler with our product guide. Instructions are tabulated step by step below on how to use our tables with the program.

#### Instructions

Under the Section segment:

On the second line:

1. **A** refers to Cross Sectional Area found in all products under Sectional Properties.
2. **J** refers to Torsion Constant found in all products under Sectional Properties.
3. **I<sub>y</sub>** refers to moment of inertia about the Y axis found in all products under Sectional Properties.
4. **I<sub>z</sub>** refers to moment of inertia about the X axis found in all products under Sectional Properties.
5. **A<sub>y</sub>** refers to shear area. This can be left as zero.
6. **A<sub>z</sub>** refers to shear area. This can be left as zero.
7. **Alpha** does not need to be altered.
8. **Mark** refers to section mark. This is not important for design.

Under the Material segment:

1. The first box refers to the material number.
2. The second box refers to the material name.
3. E refers to the Modulus of Elasticity found on pages 10 & 12 under Coupon Properties.
4. Poisson's refers to the Poisson's Ratio of FRP which is 0.23.
5. Mass Density refers to Density found on pages 10 & 12 under Coupon Properties.
6. Temp. Coefficient refers to the Coefficient of Thermal Expansion, LW, found on pages 10 & 12 under Coupon Properties.
7. F'c refers to the compressive strength of concrete which is 0.

Edit/Query Member														
Member:	1	Type	Normal	Cable Len	0	Chord Length	10	Angle	0	Node	N/A	Axis	N/A	Close
End A:	1	Fixity	FFFFFF	Trans	x y z	Rot	x y z	y Stiffness	0	z Stiffness	0			Cancel
End B:	2	Fixity	FFFFFF	Trans	x y z	Rot	x y z	y Stiffness	0	z Stiffness	0			Results
Section:	1			Source:	Manual	Flip:	No	Angle Type:	N/A					Help
		A	J	I <sub>y</sub>	I <sub>z</sub>	A <sub>y</sub>	A <sub>z</sub>	Alpha	Mark					Regen
		0	0	0	0	0	0	0						
Material:	1			E	Poisson's	Mass Dens	Temp Coeff	F'c						
		0	0	0	0	0	0	0						

