

Here is the program info:

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Name of Program:  STRUCTURAL SECTION PROPERTY EXTRACTOR

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SectPROP("", "about")=

Caveat:
This Computer Program is protected by International Law.
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penalties, and will be prosecuted to the maximum extent of
the law."

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I can use the "SectProp" function to get properties from many shapes out of the AISC Manual such as a W12x22.

$A_1 := \text{SectPROP}(\text{"W12x22"}, \text{"A"}) = 6.48 \text{ in}^2$

The problem comes when I try to get a shape that has "/" or "." in the name. This includes most angles, HSS members and several other shapes.

```

"[Beam L5x5x3/8 does not exist!]

Select from Beam Sizes below:
1.) L5x5x7/8
2.) L5x5x3/4
3.) L5x5x5/8
4.) L5x5x1/2
5.) L5x5x7/16
6.) L5x5x3/8
7.) L5x5x5/16
8.) L5x3-1/2x3/4
9.) L5x3-1/2x5/8
10.) L5x3-1/2x1/2
11.) L5x3-1/2x3/8
12.) L5x3-1/2x5/16
13.) L5x3-1/2x1/4
14.) L5x3x1/2
15.) L5x3x7/16
16.) L5x3x3/8
17.) L5x3x5/16
18.) L5x3x1/4
"

A2 := SectPROP("L5x5x3/8", "A")=

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"[Beam HSS20x4x1/4 does not exist!]
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Select from Beam Sizes below:
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1.) HSS20x12x5/8
2.) HSS20x12x1/2
3.) HSS20x12x3/8
4.) HSS20x12x5/16
5.) HSS20x8x5/8
6.) HSS20x8x1/2
7.) HSS20x8x3/8
8.) HSS20x8x5/16
9.) HSS20x4x1/2
10.) HSS20x4x3/8
11.) HSS20x4x5/16
12.) HSS20x4x1/4
13.) HSS20x0.500
14.) HSS20x0.375
"

```

$A_3 := \text{SectPROP}(\text{"HSS20x4x1/4"}, \text{"A"}) =$

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"[Beam WT8x15.5 does not exist!]
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Select from Beam Sizes below:
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1.) WT8x50
2.) WT8x44.5
3.) WT8x38.5
4.) WT8x33.5
5.) WT8x28.5
6.) WT8x25
7.) WT8x22.5
8.) WT8x20
9.) WT8x18
10.) WT8x15.5
11.) WT8x13
"

```

$A_4 := \text{SectPROP}(\text{"WT8x15.5"}, \text{"A"}) =$

"[Beam HSS7x0.500 does not exist!]

Select from Beam Sizes below:

- 1.) HSS7x7x5/8
- 2.) HSS7x7x1/2
- 3.) HSS7x7x3/8
- 4.) HSS7x7x5/16
- 5.) HSS7x7x1/4
- 6.) HSS7x7x3/16
- 7.) HSS7x7x1/8
- 8.) HSS7x5x1/2
- 9.) HSS7x5x3/8
- 10.) HSS7x5x5/16
- 11.) HSS7x5x1/4
- 12.) HSS7x5x3/16
- 13.) HSS7x5x1/8
- 14.) HSS7x4x1/2
- 15.) HSS7x4x3/8
- 16.) HSS7x4x5/16
- 17.) HSS7x4x1/4
- 18.) HSS7x4x3/16
- 19.) HSS7x4x1/8
- 20.) HSS7x3x1/2
- 21.) HSS7x3x3/8
- 22.) HSS7x3x5/16
- 23.) HSS7x3x1/4
- 24.) HSS7x3x3/16
- 25.) HSS7x3x1/8
- 26.) HSS7x2x1/2
- 27.) HSS7x2x3/16
- 28.) HSS7x2x1/4
- 29.) HSS7.625x0.375
- 30.) HSS7.625x0.328
- 31.) HSS7.500x0.500
- 32.) HSS7.500x0.375
- 33.) HSS7.500x0.312
- 34.) HSS7.500x0.250
- 35.) HSS7.500x0.188
- 36.) HSS7x0.500
- 37.) HSS7x0.375
- 38.) HSS7x0.312
- 39.) HSS7x0.250
- 40.) HSS7x0.188
- 41.) HSS7x0.125

"

$A_{45} := \text{SectPROP}(\text{"HSS7x0.500"}, \text{"A"}) =$