

NAME

genpyr - generate a RADIANCE description of a square based pyramid

SYNOPSIS

genpyr mat name s show_type xsize ysize zsize [opt] [taper angle]

DESCRIPTION

Genpyr produces a RADIANCE scene description of a square based pyramid. This function allows to create almost any square based pyramid represented as a surfaces or as wireframe. The user has to define the length, width and height of the pyramid in order to get a "basic centered" pyramid. Although he can also define the "justification" of the upper vertex, by saying, for instance, TL for top-left location. Also he can define the taper angle of the inclined surfaces. In this case he can get a truncated pyramid.

OPTIONS

The options are for the show_type are:

- i --> normal pointing inside,
- o --> normal pointing outside,
- w --> wireframe

radius : When show_type is -w (wire frame) this option must get a value greater than 0. In show_type -i or -o (surface) radius value is irrelevant, however you must give any (0).

The options are for the placement of the top base:

- tl, tc, tr: top left, center, right
- bl, bc, br: bottom left, center, right
- cl, cc, cr: center left, center, right

The taper angle allows create tapered pyramids. The value must: lie between 0 and 90 (0 --> vertical, 90 --> horizontal).

EXAMPLE

To create a wire framed pyramid of 8 X units and 8 Y units with a height of 6 Z units centered at the top, and with a taper angle of 30 degrees (the radius of each pole is 0.2 units), write:

```
genpyr red_plastic pyr1 s -w 0.2 8 8 6 cc 30
```

AUTHOR

Abraham Yezioro

BUGS

Remember to specify the "s" parameter after the name. It is for future development of this finction. The data input must be entered in the order specified in the synopsis.

SEE ALSO

xform(1)