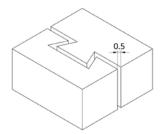
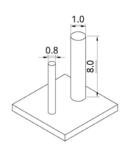
## Precious Metal Additive Manufacturing Design Guidelines

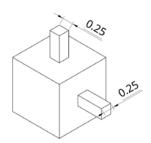




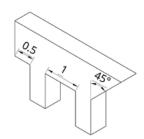
Clearance
Minimum distance between
separate parts 0.5mm



Freestanding Pins
Minimum diameter **0.8mm**Minimum h:Ø ratio **8:1** 



Minimum Feature Size Smallest printable feature 0.25mm



Overhangs

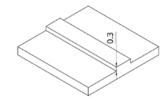
Maximum angle of overhang before a surface needs support 45°



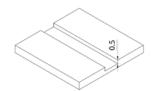
Overhangs more than 45° do not need support up to 0.5mm out from a supporting surface. Unsupported bridges between supporting surfaces can be up to 1mm long



Powder Escape
Minimum diameter
of hole for powder
to escape from
hollow part 1.0mm



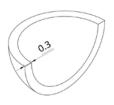
Raised Details Minimum height of raised details on horizontal surface 0.3mm



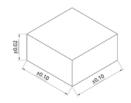
Recessed Details Minimum depth of recessed details on horizontal surface 0.5mm



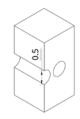
Vertical Holes
Minimum diameter for vertical holes 0.5mm



Wall Thickness
Minimum
recommended
wall thickness 0.3mm



XYZ Tolerance
X & Y print tolerance 0.1mm
Z resolution 0.02mm



Horizontal Holes
Maximum diameter
for unsupported
tunnel 0.5mm