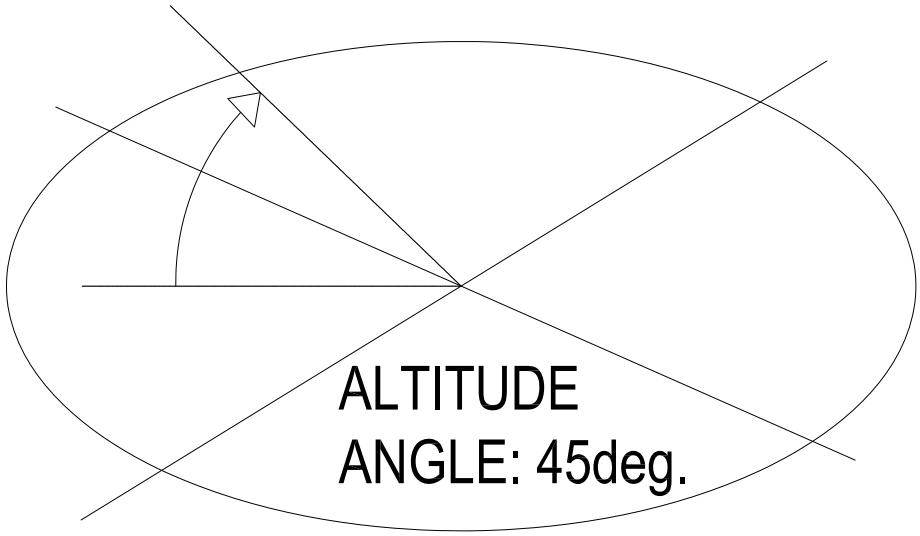
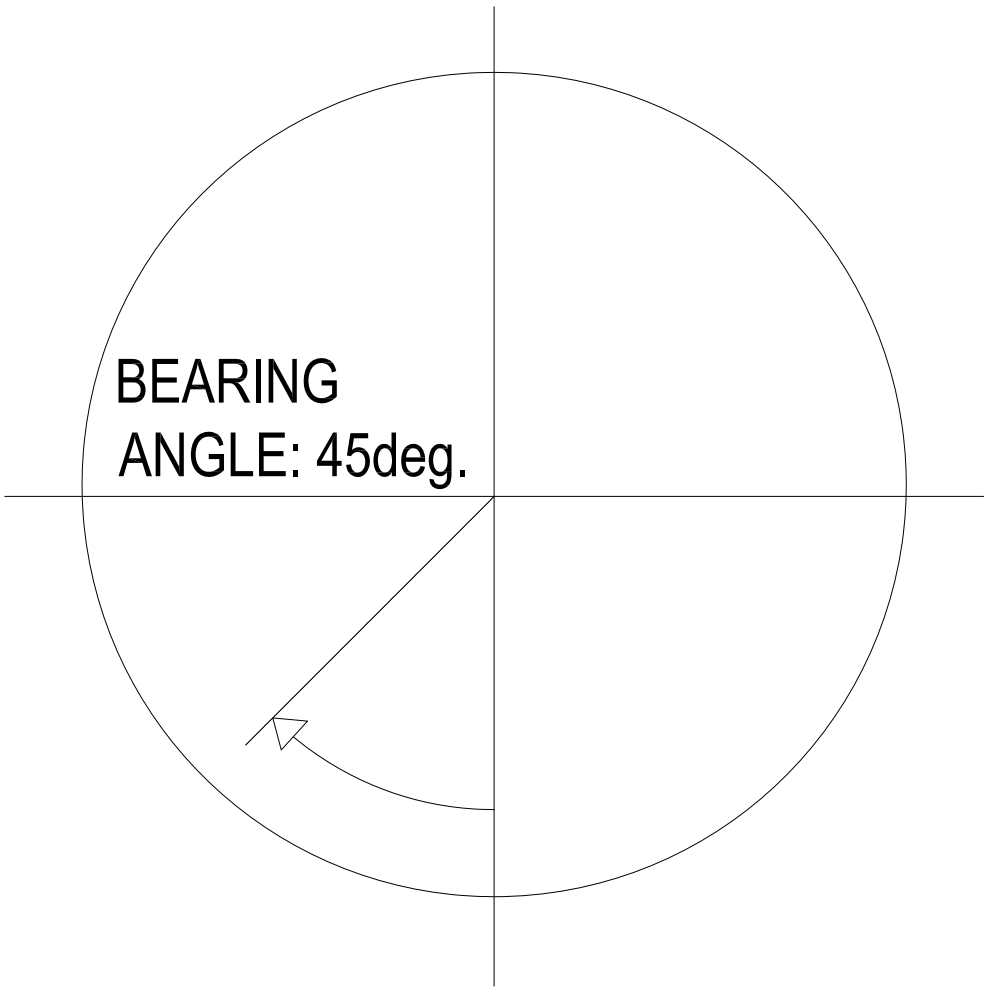
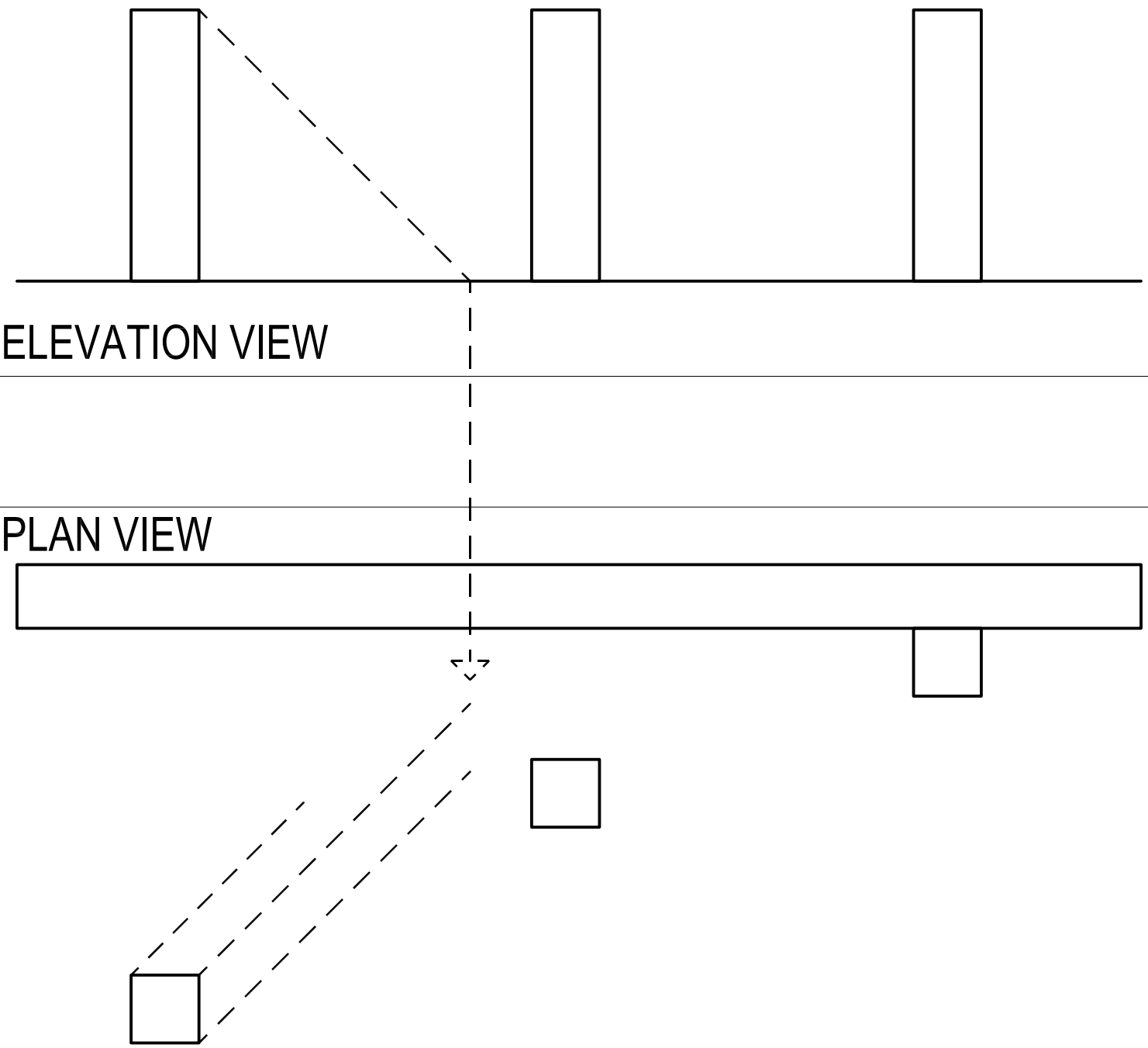
DETERMINE SOLAR EFFECTS

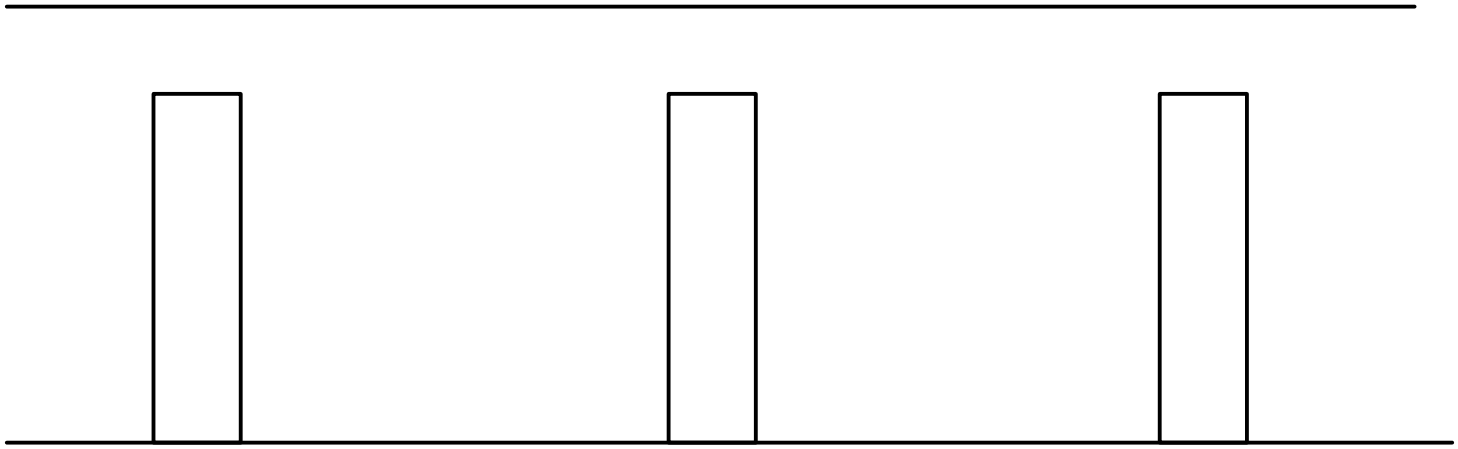




1 extend shadow in elevation to determine where it meets the ground plane

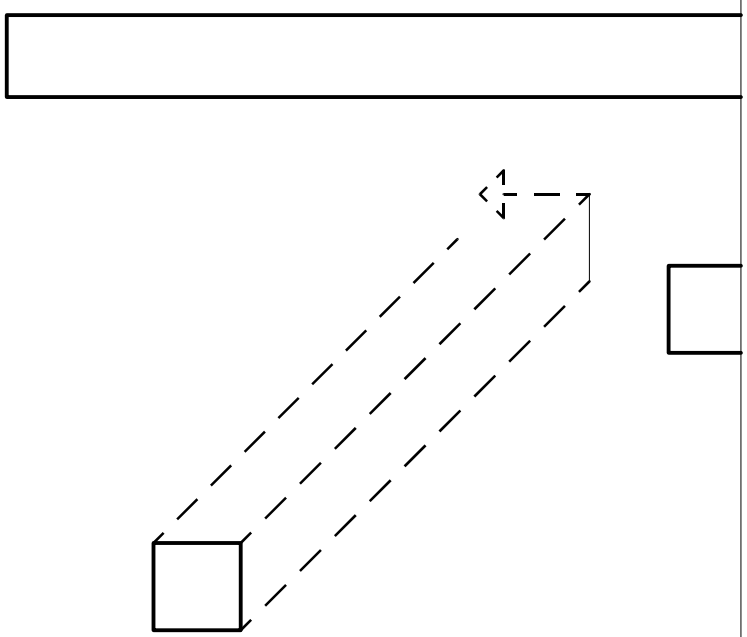


2 extend shadow lines in plan to determine angle of shadow on the ground plane

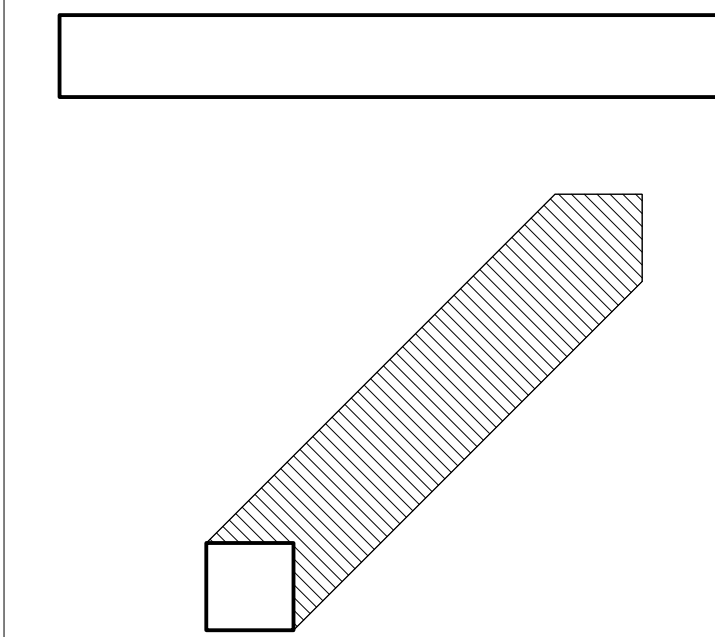


ELEVATION VIEW

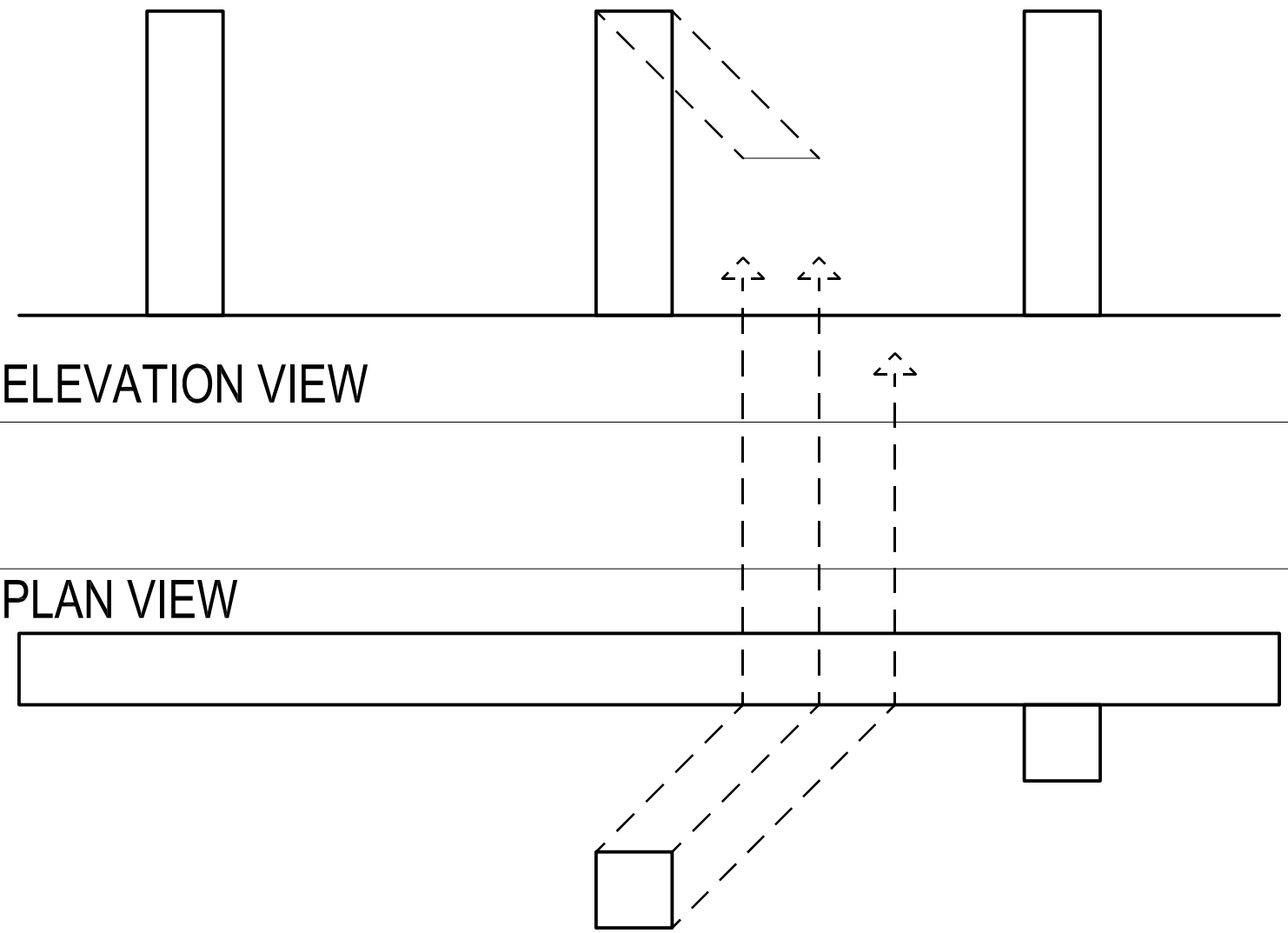
PLAN VIEW



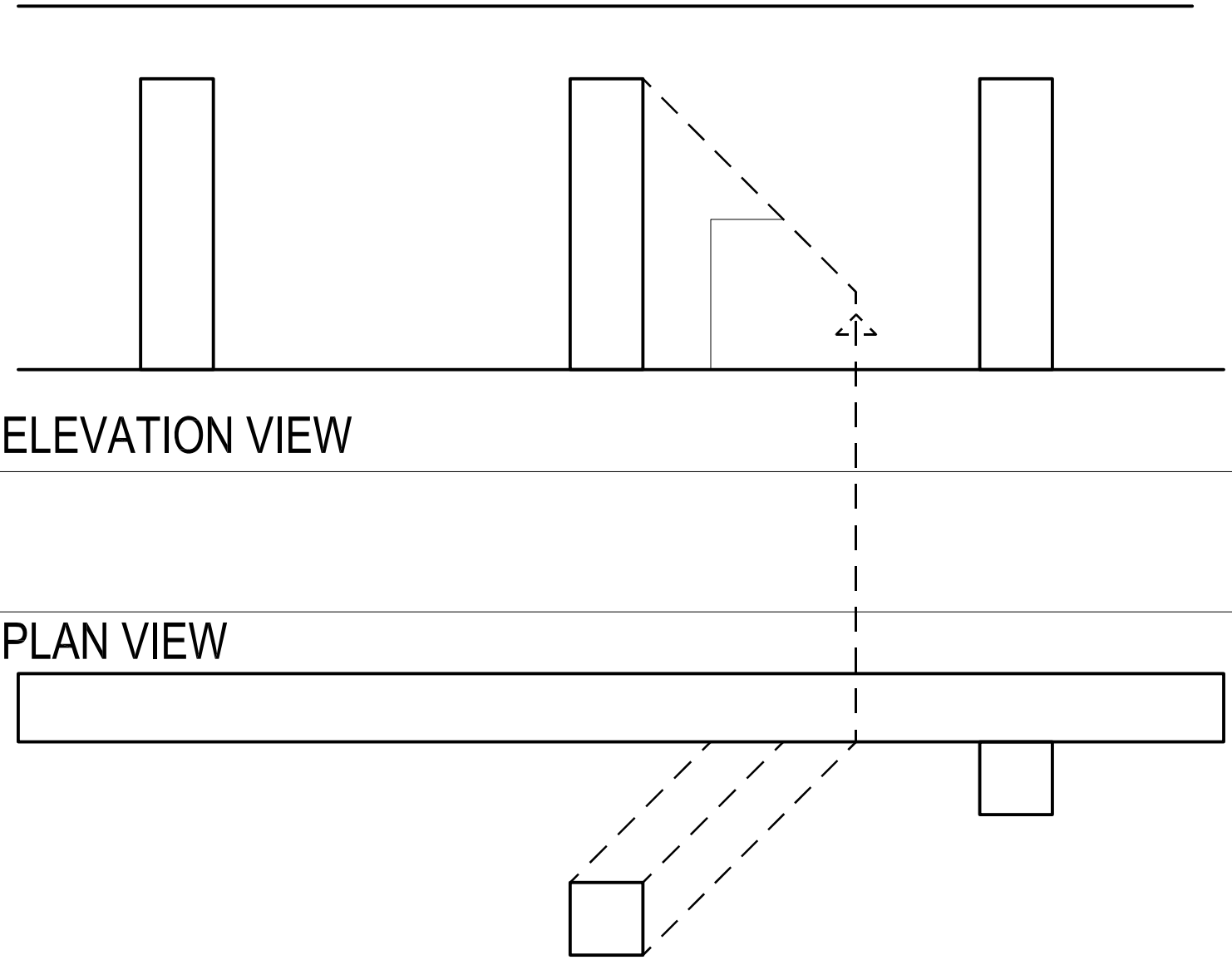
1 complete shadow construction



2 extend shadow in elevation to determine the shape and extent of the shadow

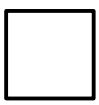


1 extend shadow lines in plan to determine angle of shadow and where they will hit the wall



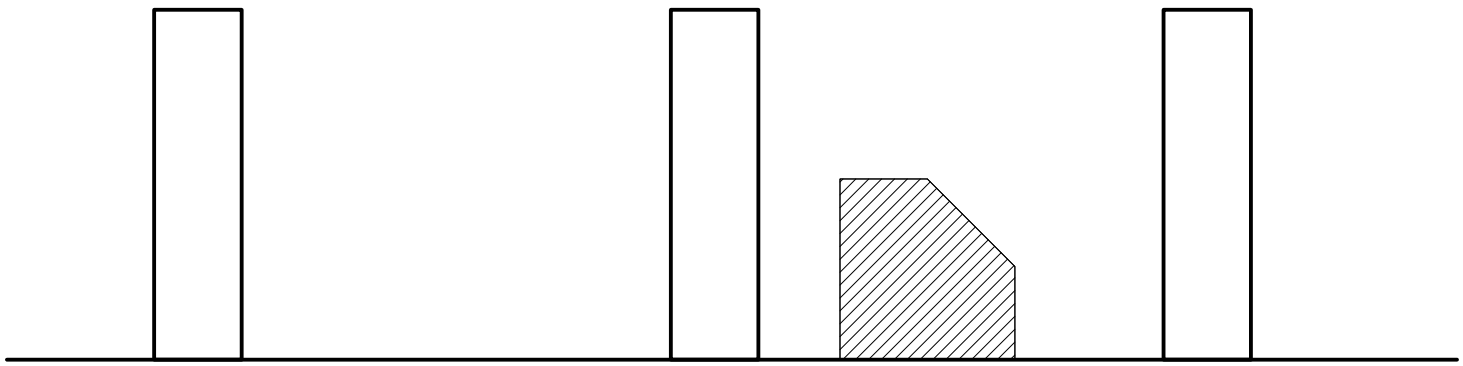
ELEVATION VIEW

PLAN VIEW



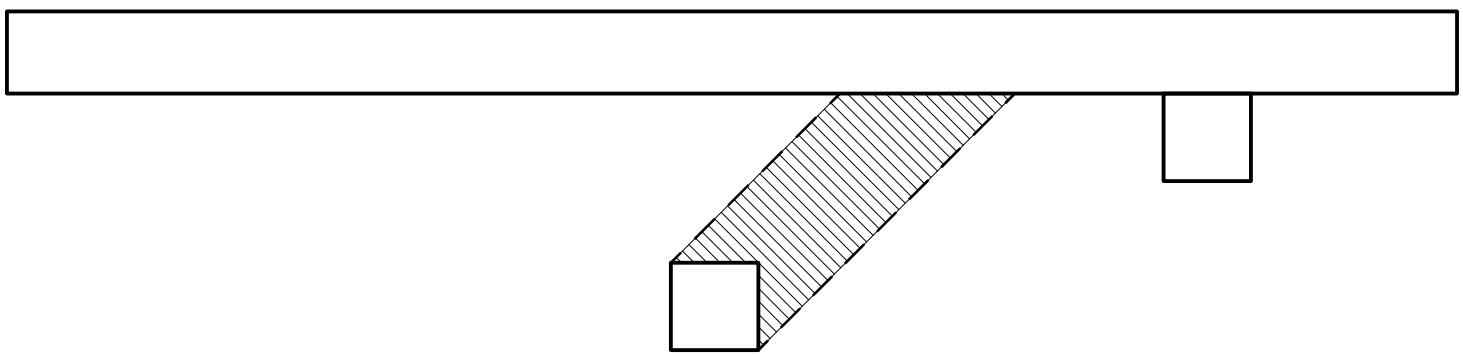
1 extend shadow lines in plan to determine angle of shadow and where they will hit the wall

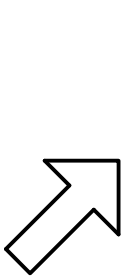
1 complete shadow construction



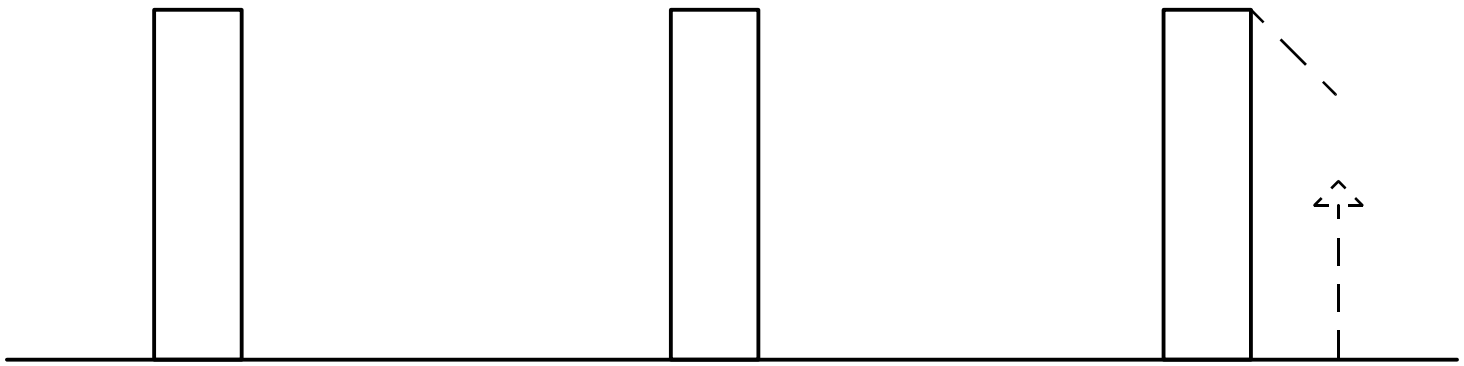
ELEVATION VIEW

PLAN VIEW



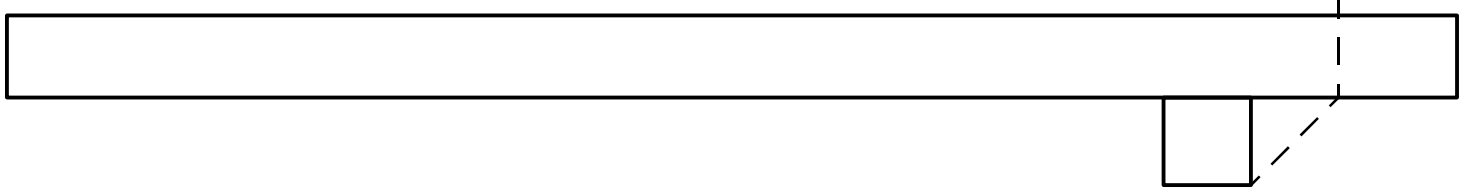


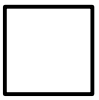
2 extend shadow in elevation to determine the shape and extent of the shadow

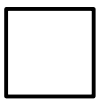


ELEVATION VIEW

PLAN VIEW

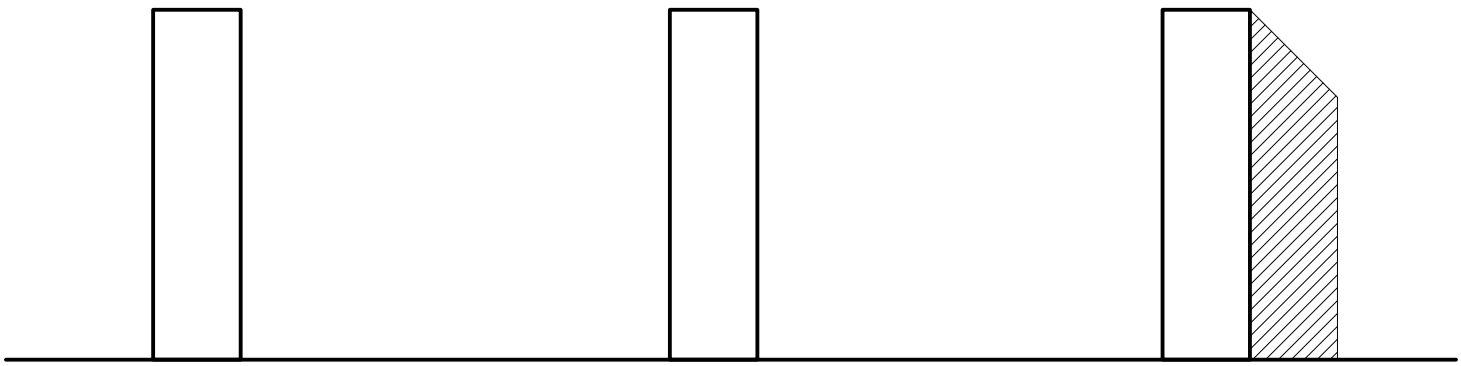






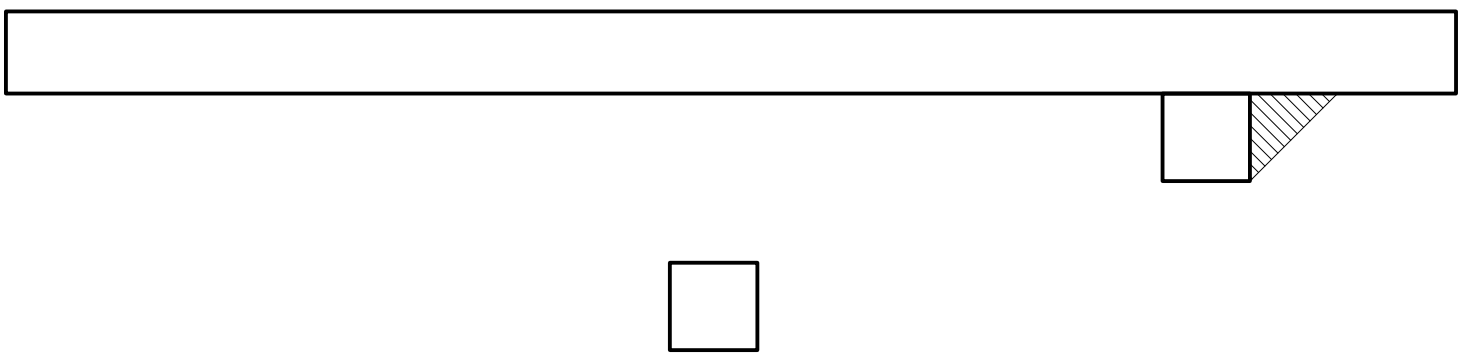
1 extend shadow lines in plan to determine angle of shadow and where they will hit the wall

1 complete shadow construction

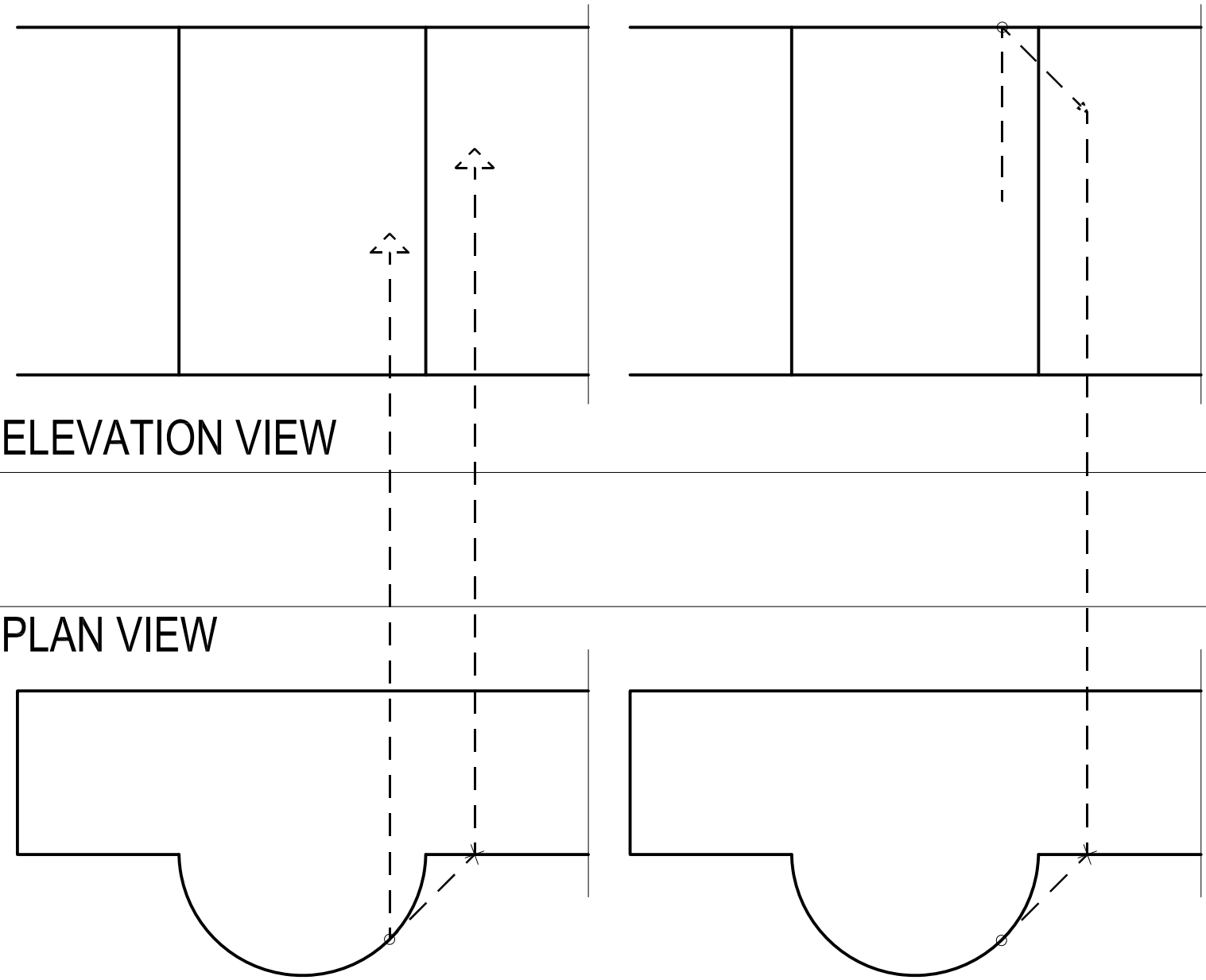


ELEVATION VIEW

PLAN VIEW

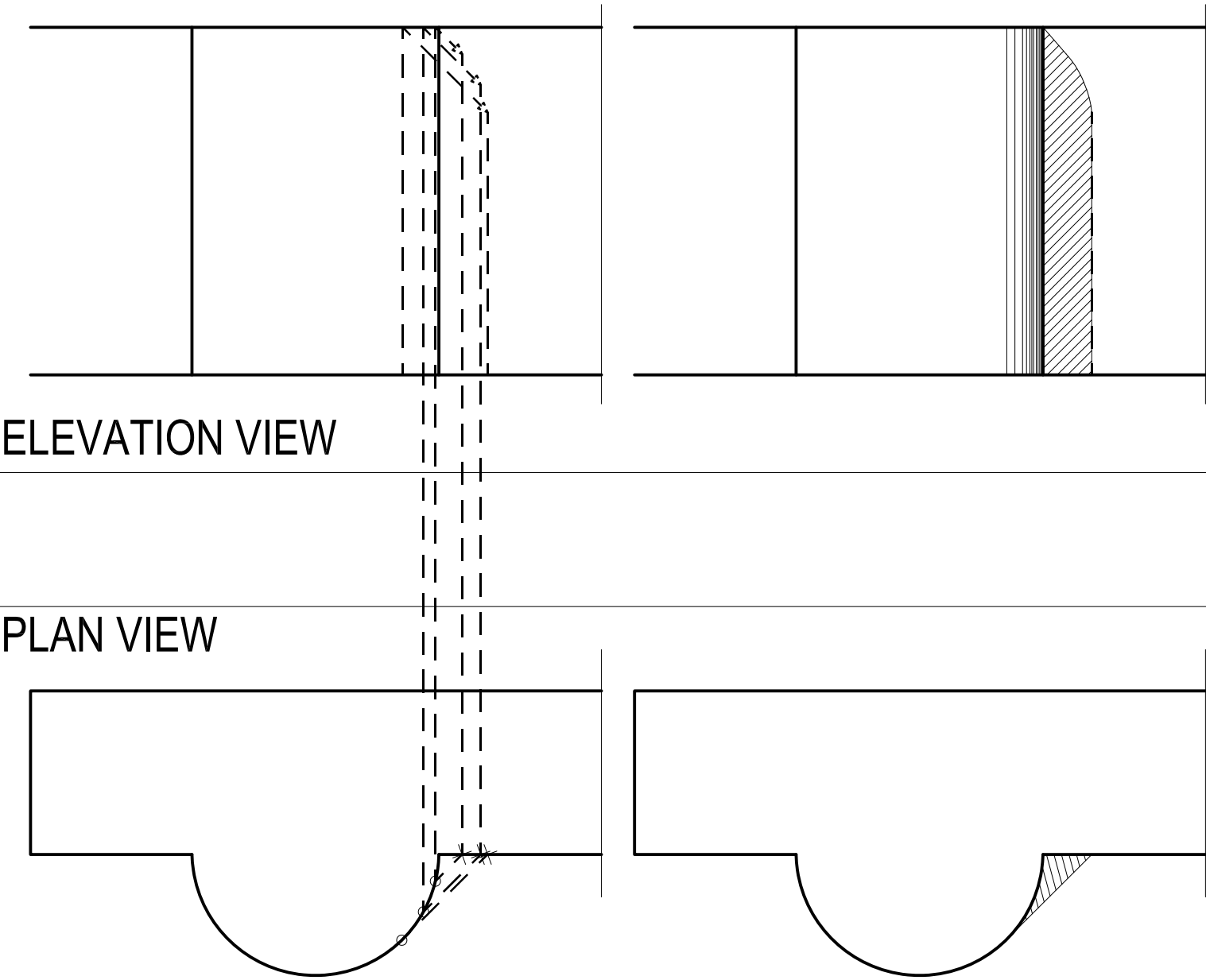


2 this point determines the extreme edge of the shadow.



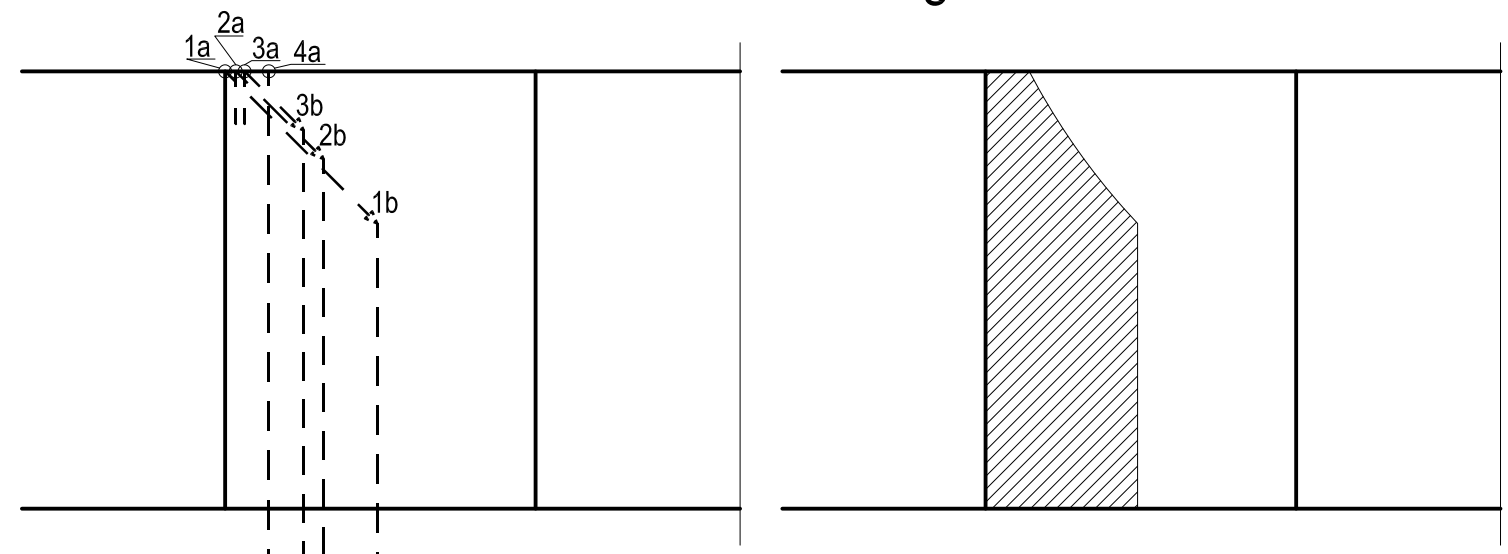
1 determine the farthest tangent point that will catch the light and cast a shadow - transfer those points to the elevation drawing

1 transfer a few other points to establish the general form of the shadow.



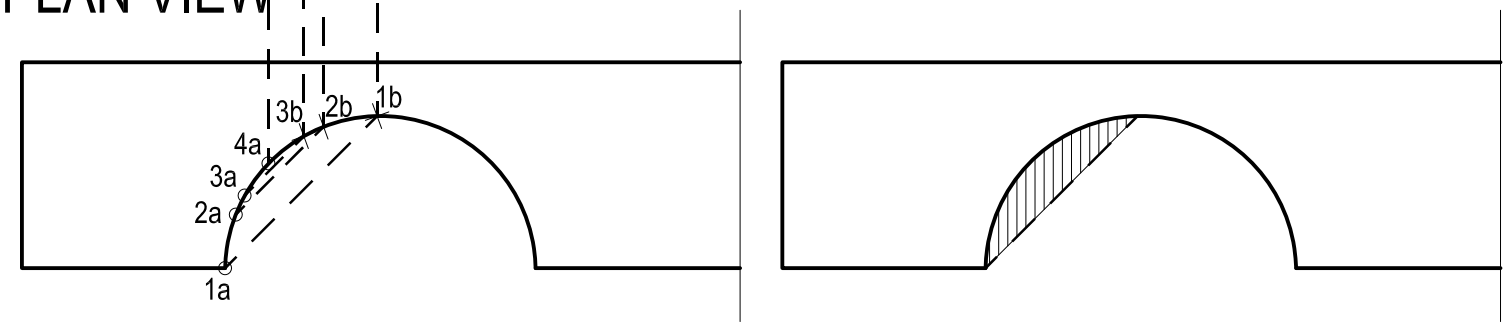
2 complete shadow construction

2 point 4a represents the point at which the curve of the shadow will begin



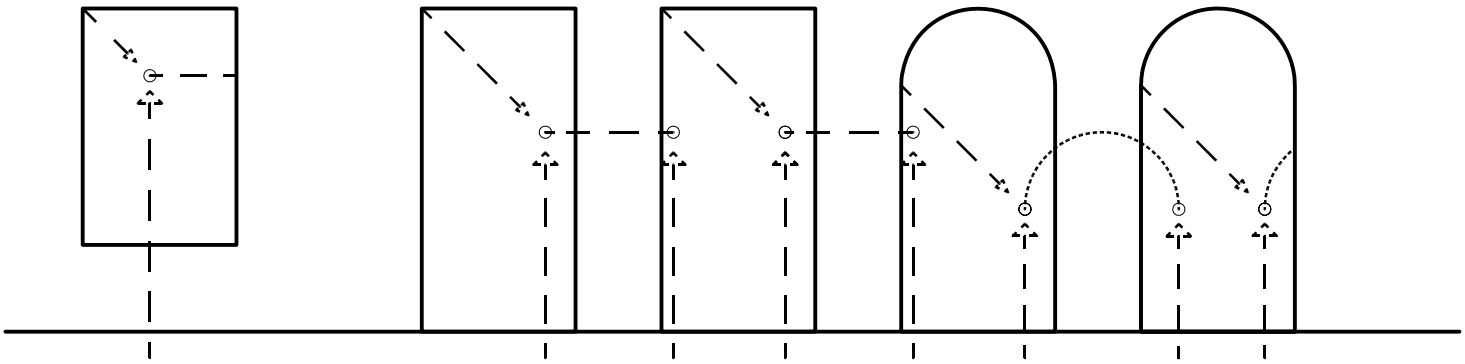
ELEVATION VIEW

PLAN VIEW



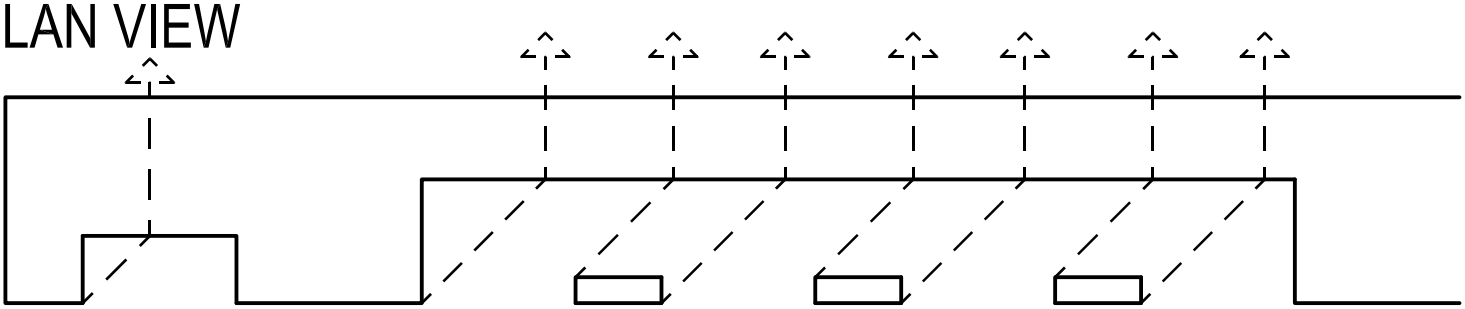
1 determine the outermost edge of the shadow and find additional points to map out its form

1 note that the shadow of a shape on a parallel plane is identical in size and shape to the original object (eg, curves).



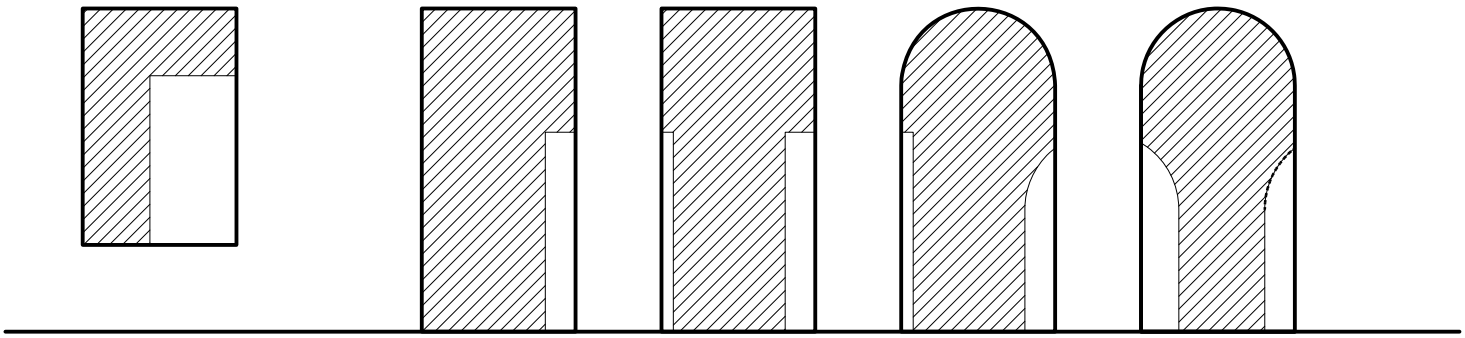
ELEVATION VIEW

PLAN VIEW



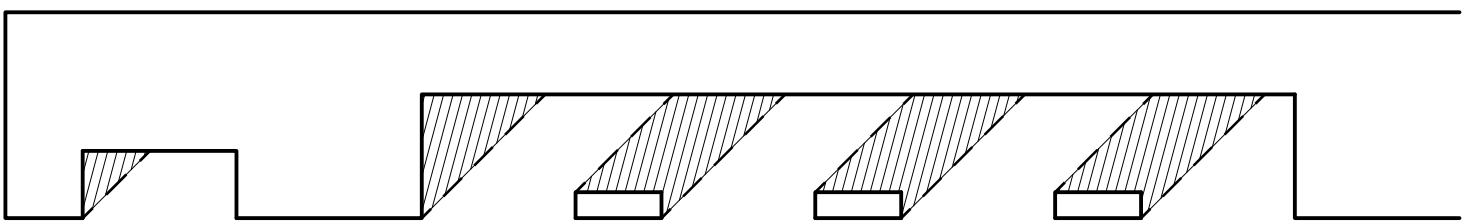
1 transfer shadow directions from plan to elevation drawing - note that shadows are cast from the most extreme edges of an object (ie, every part of an object in light must cast a shadow)

1 complete shadow construction

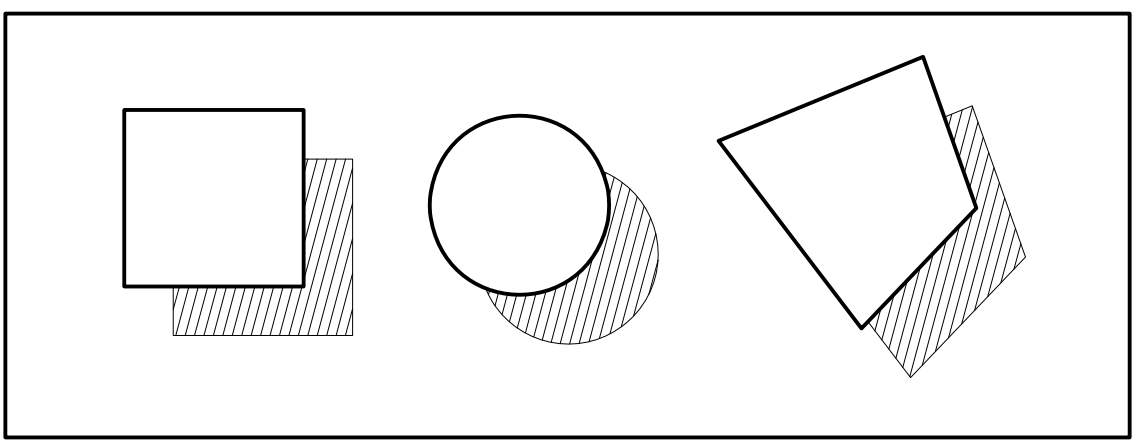


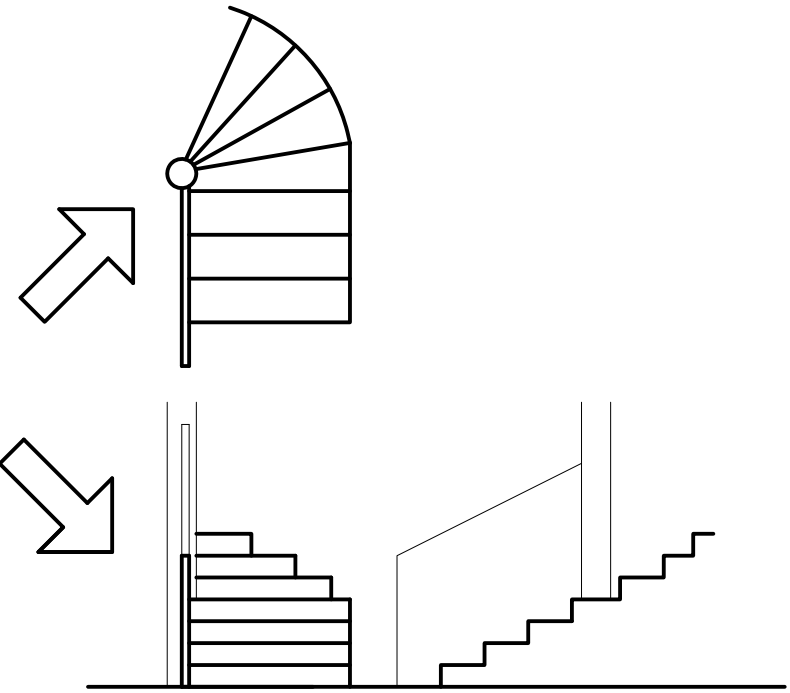
ELEVATION VIEW

PLAN VIEW

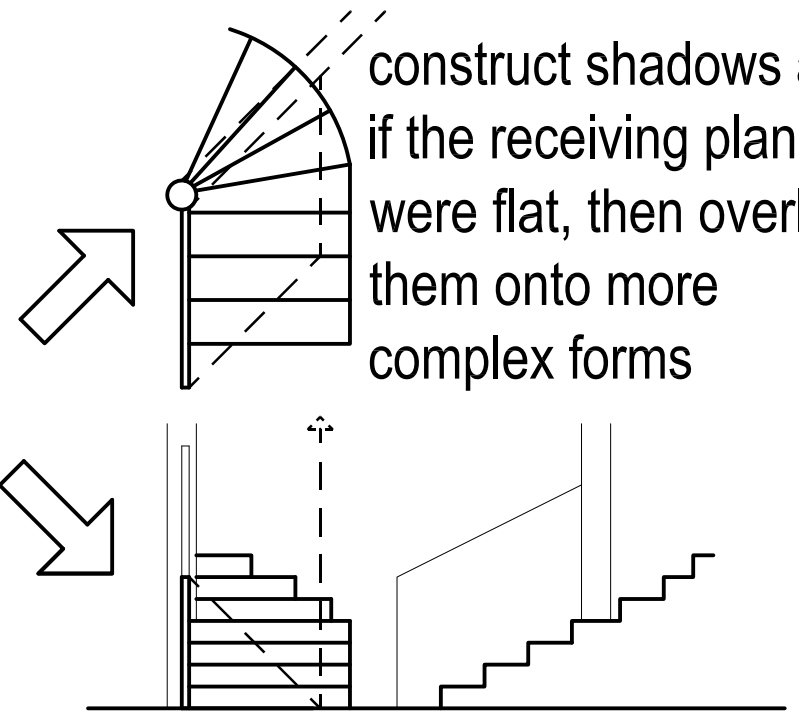


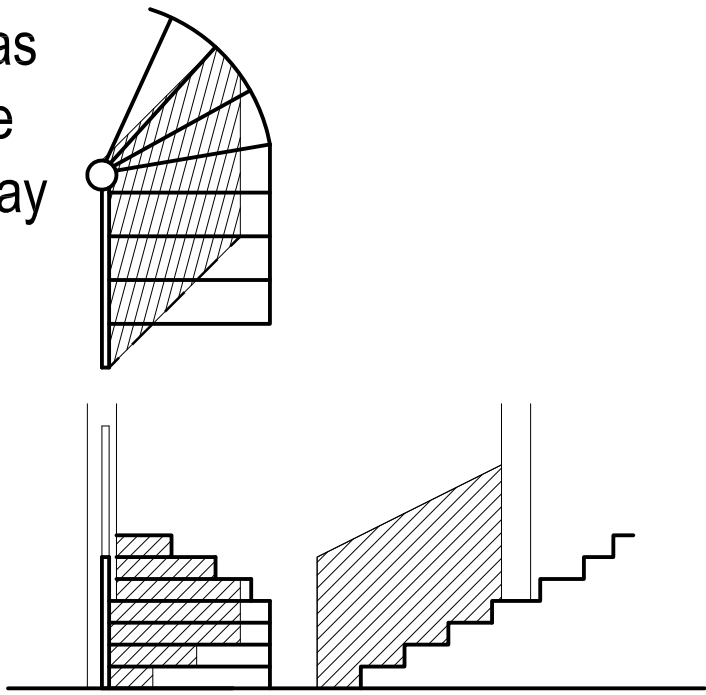
shape of object and shadow are the same



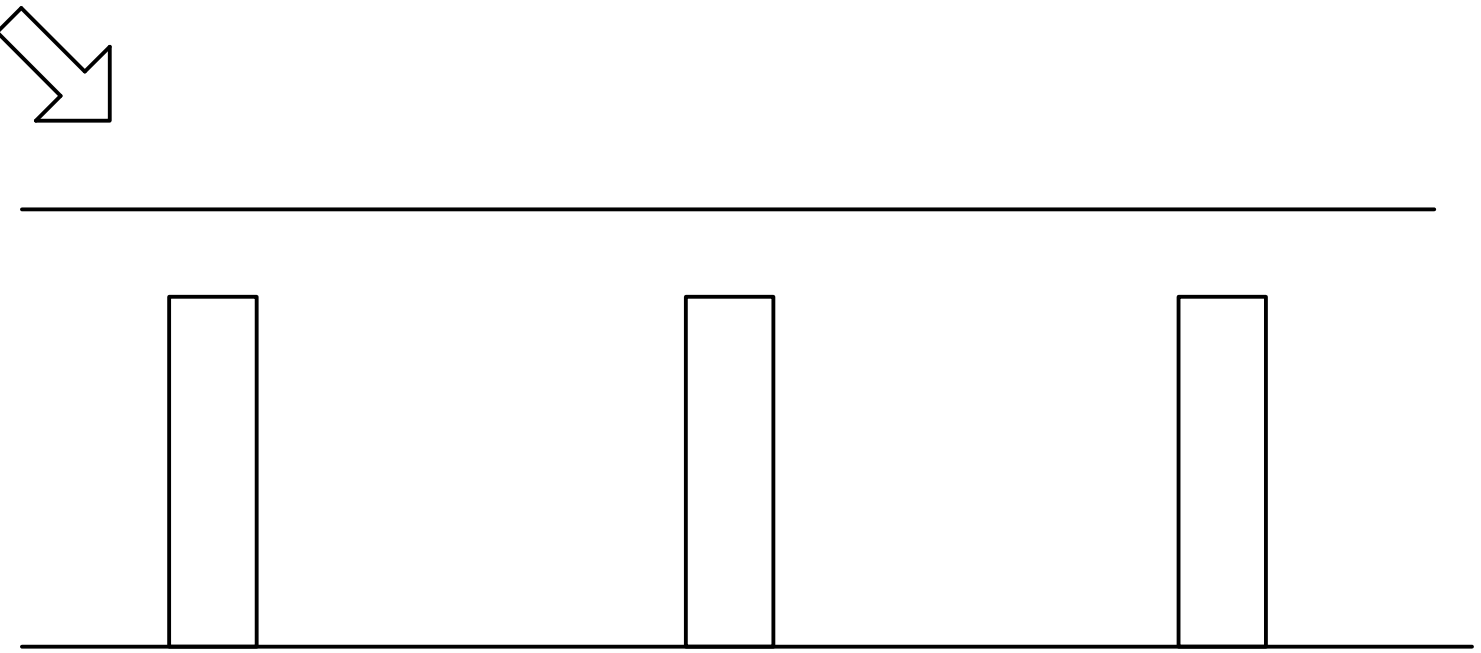


construct shadows as if the receiving plane were flat, then overlay them onto more complex forms



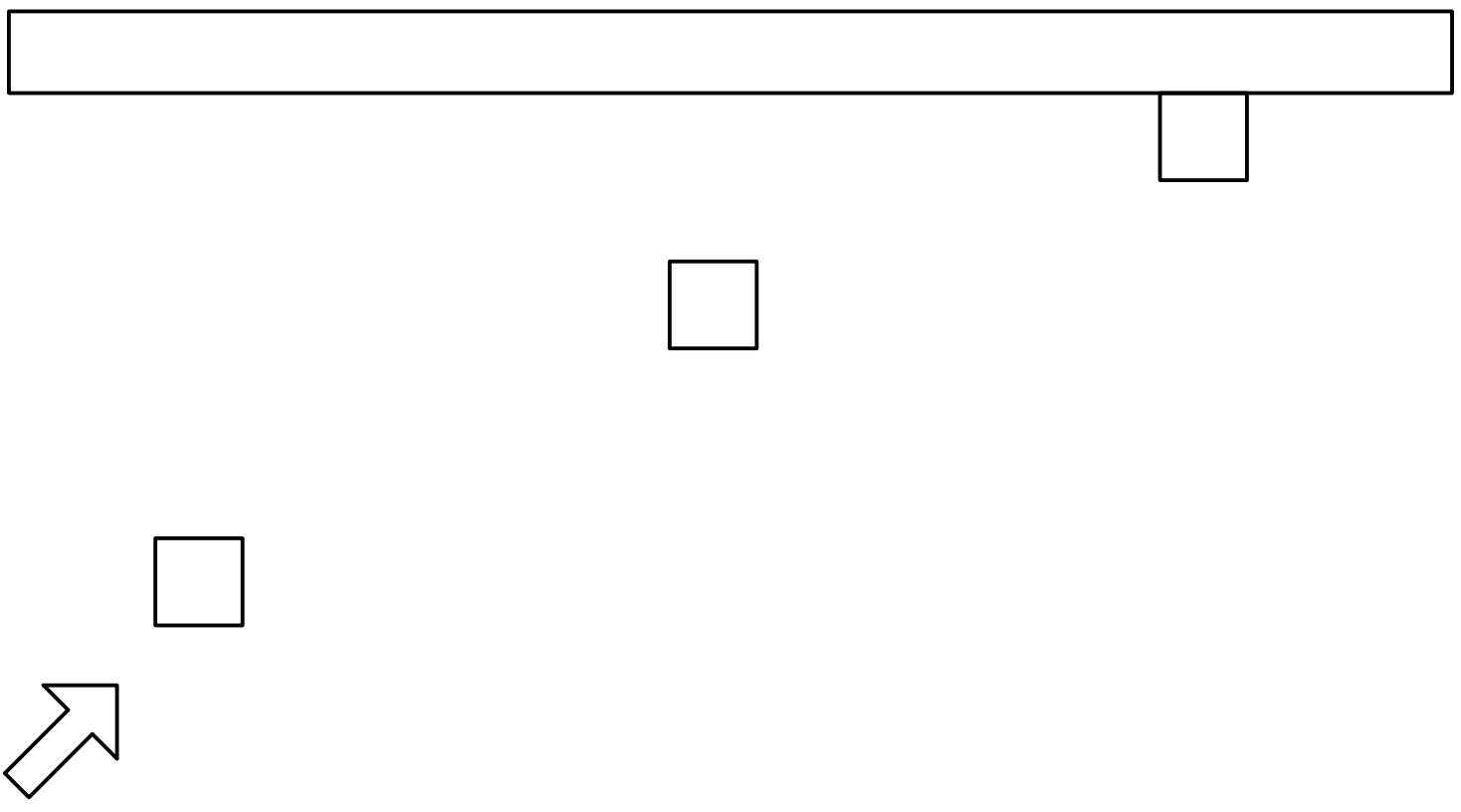


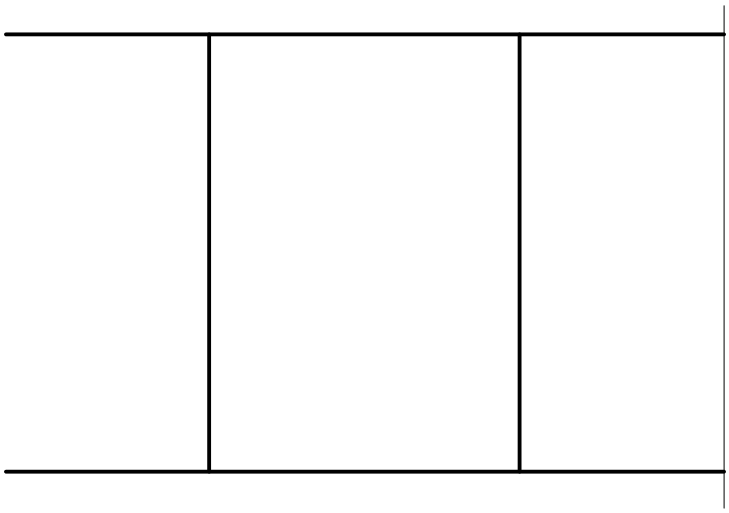
for complex objects such as stairs, use a combination of drawings to determine the shadows



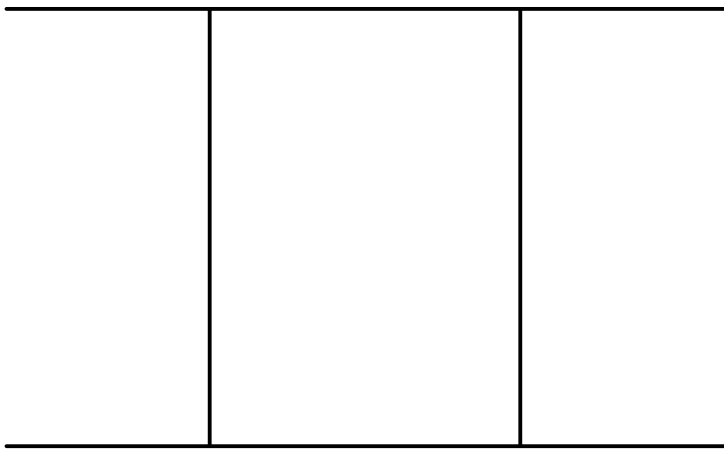
ELEVATION VIEW

PLAN VIEW



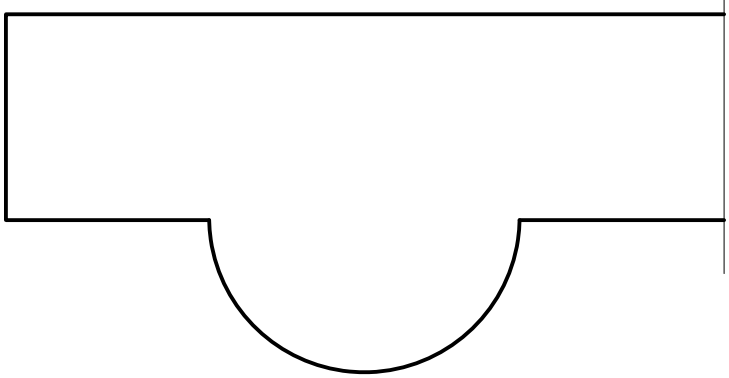


ELEVATION VIEW

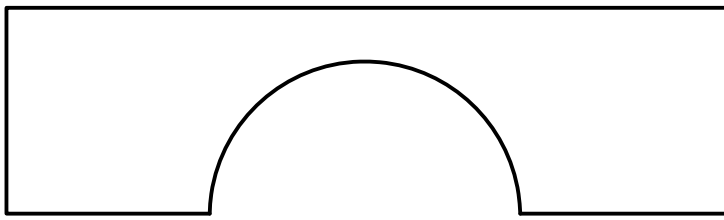


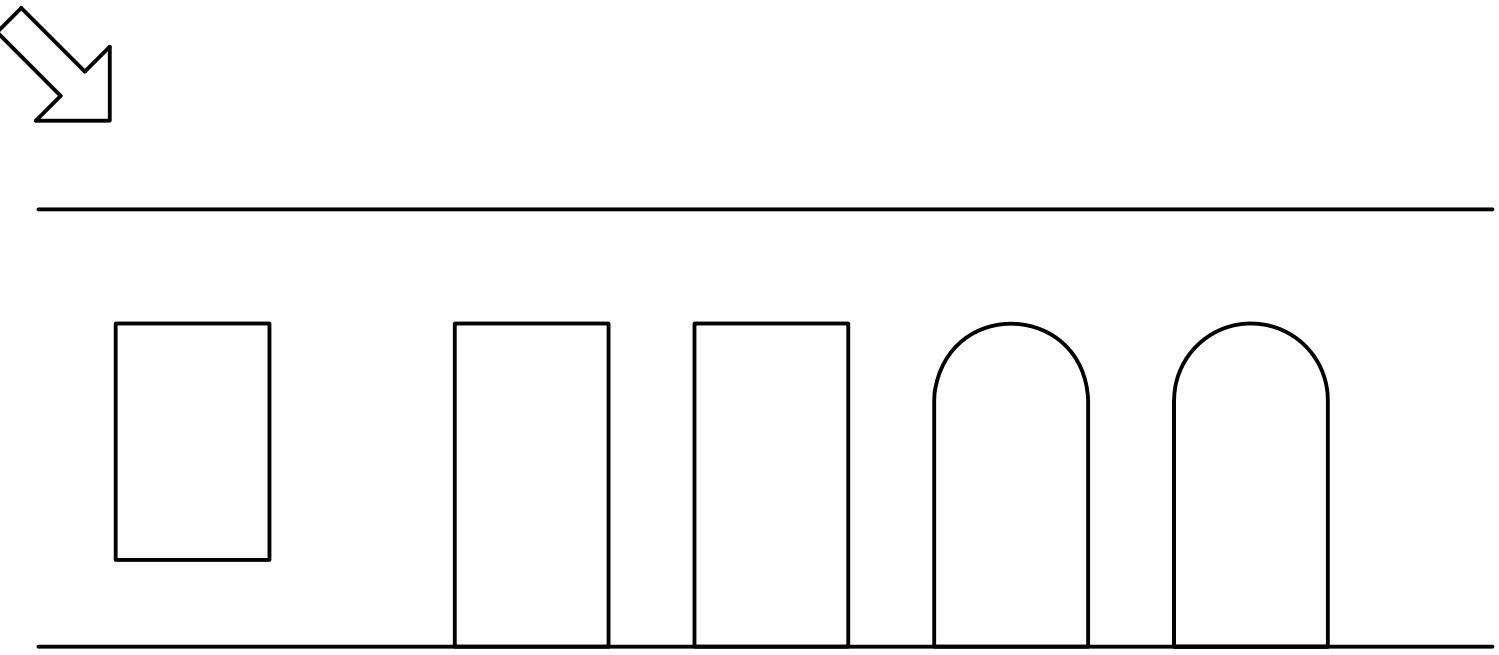
ELEVATION VIEW

PLAN VIEW



PLAN VIEW





ELEVATION VIEW

PLAN VIEW