

hanit[®] products can be worked on with traditional wood or metal working tools and machines.

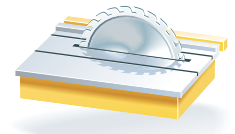
On account of the material characteristics, however, some specifics need to be kept in mind:

- In general, working on the profiles causes more tool wear. Therefore, we recommend tools with hard metal components.
- hanit[®] recycling products have a closed surface. Their core has a partly porous, grid-type structure that shows during mechanical processing. These are material characteristics and do not constitute a cause for complaints.

Tool Selection

Sawing/Cutting:

An optimal cross section is achieved by means of fast rotating band and half-rip circular saws. In order to avoid smearing of the plastics we recommend fast chip removal. Length reductions can also be carried out with a chainsaw, which, however, reduces accuracy.



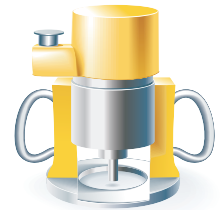
Drilling:

Spiral drills with a 20 - 30° angle of twist and a 110 - 120° point angle can almost always be used. In the case of great drilling depths, occasional chip removal strokes will avoid high frictional heat.



Milling:

We recommend to choose rather large chip dimensions to keep the ensuing machining warmth relatively low. Ample cutting depths and feed are advisable, cutting speed, however, should be low.



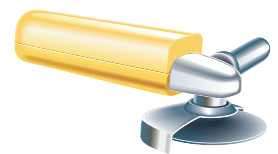
Planing:

Standard planers are also suited for plastics. The surface greatly depends on feed, cutting speed, clearance and rake angle as well as the condition of the cutting knives.



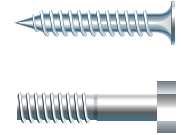
Deflashing and Deburring:

Due to their high rotational speed angle grinders are not suited for cutting operations. Plastic parts showing burrs and edges can be worked with an angle grinder though.



Tips for Working on Recycling Profiles:

If recycling profiles are intended to be screwed together, the profile to be affixed needs to be pre-drilled (e.g. boards, planks). The borehole has to be bigger than the screw, i.e. a long hole is necessary in order to meet the properties of temperature dependent material expansion.



hanit[®] products can be nailed conventionally as well as by means of nailing machines. In comparison to wood, the penetration of the profiles is more difficult owing to the compact surface. Please take note of this fact when fixing recycling profiles.



If recycling profiles are intended to be driven into the ground, we recommend to use a ram and/or an edge protector to avoid product damages.



As far as boards and ties are concerned, compressive installation must be avoided. The profiles can show temperature dependent variation in length of +/- 1.5%. Therefore, an expansion gap needs to be allowed for during installation.



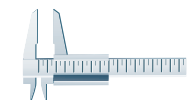
Due to their texture recycling profiles can only be painted to a limited extent. Good results have been achieved with permanently elastic paints (all-weather paint) in combination with a roughened surface and primer. However, edges and rims may show flaking. Permanent adhesion of the paint cannot be guaranteed.



Susceptibility to temperature has an effect on straightness. Solar radiation can e.g. cause fence posts to bend. In order to avoid warping, the profiles should not be stored loosely, either.



Compared to wood or metal products, plastics have less stiffness but higher flexibility. These special material characteristics need to be heeded when spacing supports during the construction of landing stages, footbridges, fences, patios, etc.



We can provide static calculations, installation recommendations and assembly instructions for many products and applications. Detailed information can be found at www.hahnkunststoffe.de

