

Aluminum Flat Bars and Angles

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Materials & Stock

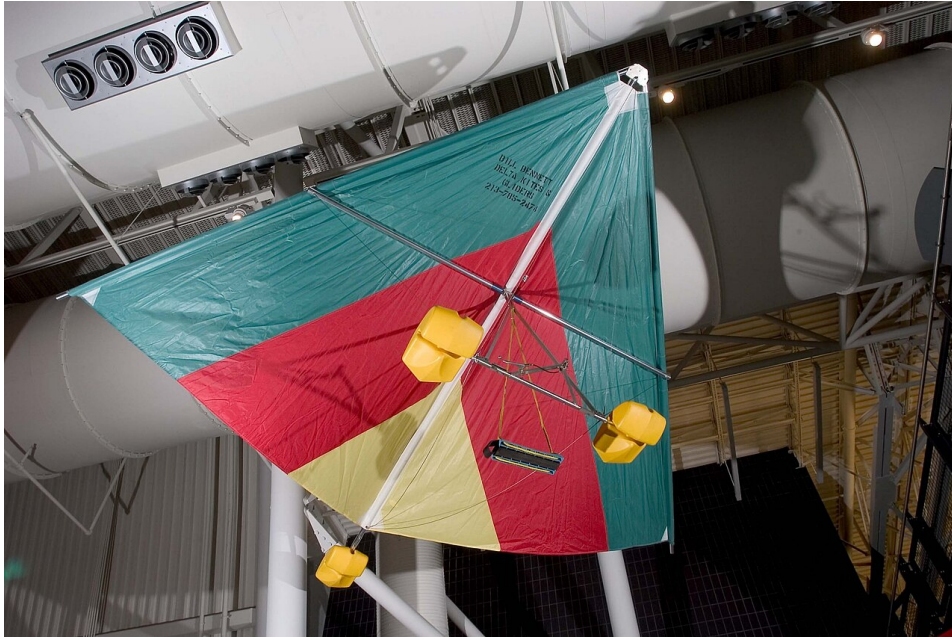


Photo: Delta Wing Kites and Gliders Incorporated — CC0 — via Wikimedia Commons
(Delta_Wing_Model_162_-_DPLA_-_f2bdb6da3a084d9a8ebd95ce0fd05932_(page_3).jpg)

Aluminium flat bars and angles are light, strong, corrosion-resistant stock for frames, brackets, slides and projects that need strength without steel weight. They cut, drill, bend and weld easily and finish well.

Key Features

- Flat bars 3-12 mm thick, up to 100 mm wide
- Equal and unequal angles 20-100 mm
- 6061-T6 and 6082 alloys common
- Mill and anodised finishes
- Cut to length by saw or shear

Typical Uses in the Workshop

- Build robot and machine frames
- Fabricate brackets, rails and guides
- Construct models, jigs and fixtures
- Support displays and shelving

Safe Operation

1. Mark the cut with a square and scribe
2. Cut with a fine-tooth saw or shear
3. Deburr the cut ends with a file
4. Drill with a centre punch and pilot
5. Fix with bolts, rivets or weld

SAFETY NOTES

- Cut ends are sharp - deburr and wear gloves
- Eye protection when cutting and drilling
- Do not bend beyond the alloy's limits
- Clamp stock securely when working
- Store loose stock upright safely

Maintenance & Consumables

- Wipe and store dry
- Protect from scratching painted surfaces
- Keep sizes sorted in a rack
- Check for corrosion where wet
- Recycle offcuts

Specification & Buying Notes

Stock 6061-T6 flat bar in 3, 6 and 10 mm and angles in the sizes the frames need. Quality extrusion stays straight and machines cleanly. Buy in budget-friendly lengths.