

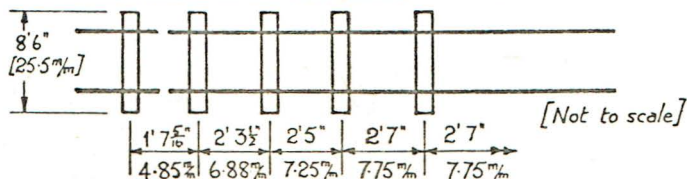
COPPER LAMINATE (pcb) SLEEPER STRIP FOR 3MM SCALE

The strip is of 1/16" copper laminate (printed circuit board), 2½mm wide for 10" plain sleepers and 3mm wide for 12" crossing timbers. It is cut just over 12" long, enabling 12 plain track sleepers of 25½mm (8' 6") length to be extracted for 14.2mm gauge or 13 of 23 or 23½mm for 12mm "TT".

CLEANING Prior to cutting, the copper surface should be lightly polished with fine emery cloth or a glass-fibre brush to remove edge burrs and clean off the copper oxide film.

CUTTING This is easily done by nicking through the copper layer with a craft knife or knife-edged Swiss file and snapping off. Where strips are packed in taped "sheets", a whole "sheet" may be so scored before removing the tapes.

SPACING Sleepers may be spaced to match proprietary 12mm gauge track or to scale prototype standards, 24 per 60ft length, for fine scale work. The sketch shows a suitable fine scale plain track arrangement with the spacing adjusted to provide maximum security at the rail joints.



POINT & CROSSING WORK For this, the 3mm wide strip should be used for prototype accuracy and greater rigidity. (It may be possible to assist f/s workers with pointwork formation diagrams to 3mm scale, 14.2mm gauge, on application.)

SOLDERING Nickel-silver rail (eg. Peco or Jones of Chiswick) is recommended. Copper and rail should be completely clean and dry. A tapered bit is best used to apply generous heat to the rail so that the job is done quickly, before heat leaks away through the rail resulting in "dry" joints. Too much heat reaching through the laminate may cause the copper layer to lift and make the plastic brittle. A 65-watt "Solon" iron and multicore solder have been found suitable. Gauging should be done directly over the sleeper being soldered. To avoid corrosion it is very important that all traces of flux be removed from the completed work before painting, particularly if an acid flux (eg. "Bakers Fluid") is used. Liberal washing in a detergent solution is advised, using a small brush. An old toothbrush will do, provided it has some stiffness left in its bristles.

INSULATION The running rails are insulated after soldering and when all sleepers have been laid in position and minor gauging adjustments made. Break through the copper layer with a knife-edged Swiss file. If this is done close to one running rail, the break will be almost invisible when painted.