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SECTION 114-PREFABRICATED METAL TRACKS

2538. Brief particulars of Somerfield track, square mesh track and channel track are included in table 3.8.

2539. Pierced metal planking can be used for road surfacing. The main features of existing types are summarized in table 25.7.

2540. The bearing strength of pierced metal planking is equivalent to about 6 ins of base, provided that it is firmly bedded on a properly levelled and well drained subgrade or base. When deformed, its load distributing power is largely destroyed.

2541. For operational roads to carry a 10,000 lb wheel load PSP may be laid direct on a subgrade with a CBR value of 15 or more. If the natural CBR value is too low determine the thickness of base required, as described in section 34, allowing an equivalent thickness of 6 ins in respect of the PSP.

2542. Metal planking is slippery in wet and frosty weather. On wet upgrades planning tends to pump mud upwards on to the surface. This may be prevented by laying it over PBS (see para 677).

In arid conditions the underlying surface should be dustproofed by spraying oil at ¼ gallon per sqyd, or by applying a bitumen sealing coat.

2543. Metal planking is normally supplied in bundles of 20 planks, secured by metal bands and wire. The minimum party for laying only is 1 NCO and 10 men for a single 10 ft width, including the opening of bundles and levering to correct the alignment, but excluding any carrying party. Organization depends primarily upon the method of delivering stores, but laying must be phased in with site preparation and essential drainage work. Whenever possible, panels should be unloaded in small dumps at proper intervals along one side of the alignment.

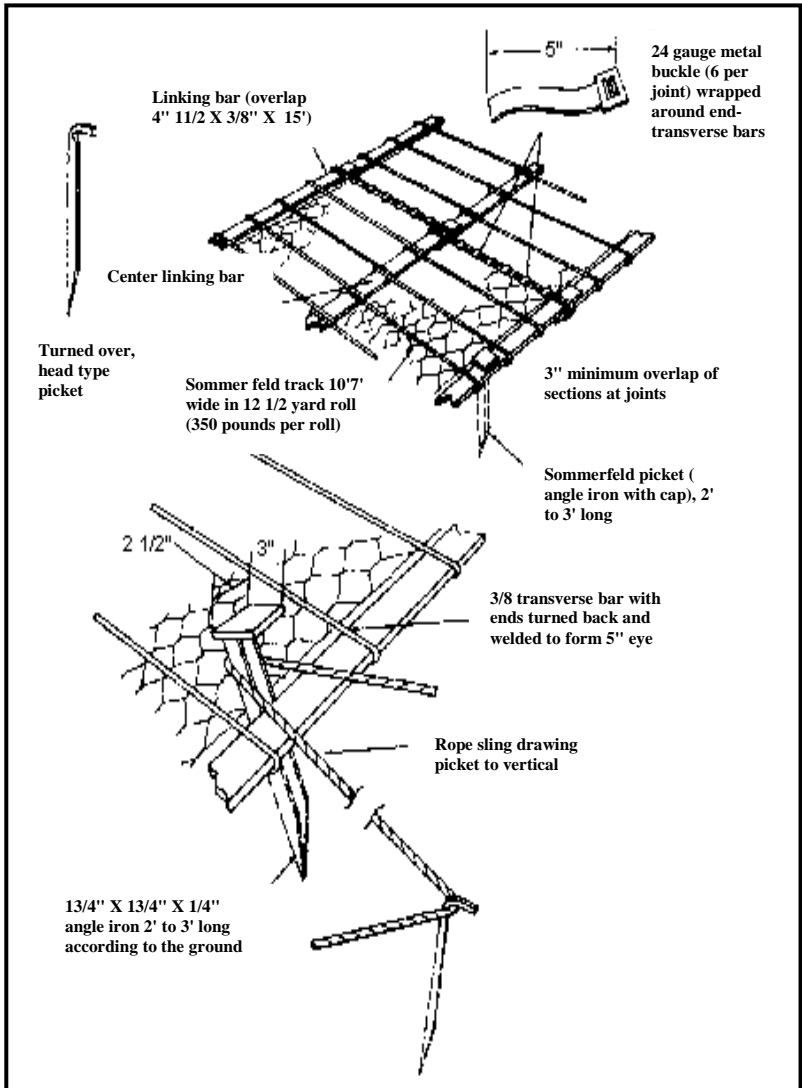


Figure 25-17: Somerfield Matt

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Table 25.7: pierced metal plank

Ser No	Tape	Dimensions of plank	Unit weight	Gross weight per 100 yds	Time for laying only single width 100 yd length (1 NCO and 10 men)	Approx number of 3 ton truck loads per 100 yds	Remarks
1.	PSP	10 '- 0 " x 1'-3"	65 lb	6.9 tons per panel width	2 ½ - 3 hours	2 ½	Planks connected by bayonet hooks and slots, locked with spring clips. Ends tend to curl and individual planks may be difficult to replace.
2.	M6 (American)	10 '- 0 " x 1'-3"	68.5 lb	7.33 tons per panel width	2 ½ - 3 hours	2 ½	Connectors looked by built in lugs. Can be used with serial no 1. End curl is reduced and plank replacement simplified.
3.	M8 steel landing mat	11 '- 9 ¾ " x 1'-7 ½ "	140 lb	10 tons (approx) per panel width	2-2 ½ hours	3 ½	Primarily for airfield use. Modified form of M6 to withstand heavier wheel loading. Connectors have bayonet hooks only on the other side.

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4.	M9 aluminum landing mat	11 ' - 9 ¾ " x 1' - 10 ¼ "	67 lb	4.1 tons (approx)	1 ¾ hours	1 ½	Both purpose and design are similar to serial no 3.
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*These times are only approximate as they are not based on full scale trials.

Few modern Metal Track of UK

2544. Class 30 track way. The Class 30 track way consists of a number of individual planks, 3.35 m long by 228 mm wide, of interlocking light alloy extrusions which are reassembled together to form a continuous surface 3.35 m wide. The upper surface of the track, ie the running surface, is fitted with anti-skid ridge and sand slots which prevent wheeled traffic from sliding sideways.

2545. The equipment provides a rapid means of crossing all types of bad going from soft mud and clay to ploughed fields and beach shingle. It will carry any wheeled or rubber tracked vehicle up to Class 30.

Tanks up to Class 50 can cross the track at an angle, but they must be driven carefully and not slewed whilst on the track.



Figure 25-18: Class 30 Track Way - Forward Laying.

2546. Boughton class 30 track way dispenser. The Class 30 Trackway Dispenser is designed to be fitted onto a Case 721 front end quick hitch (can be fitted to the Volvo 4400). The dispenser is a rectangular metal frame that has a right-angled metal frame attached to each end, with hydraulic hoses that attach to the main hydraulic system of the equipment, to allow rotation, laying and recovery of a roll of Class 30 trackway. If the hydraulic power on the dispenser should fail, the trackway can be recovered manually using the ratchet spanners provided.



Figure 25.19: Class 30 Track Way Dispenser Fitted to case 721 Medium wheeled tractor.



Figure 25-20: Class 30 Track Way Being Laid.

Class 70 Trackway

2547. The Class 70 trackway is designed to provide a common surface for wheeled and tracked vehicles at the approaches to, and exits from, bridge and ferry sites. The planks are in lengths of 4.57 m and 2.28 m, the width in each case being 230 mm (*see* Figure 25.21). The longer planks each weigh 33.1 kg and the shorter ones 16.8 kg.



Figure 25-21: Class 70 Track Way – Sliding Panels Together.



Figure 25-22: Class 70 Track Way – Preassembled Roll.