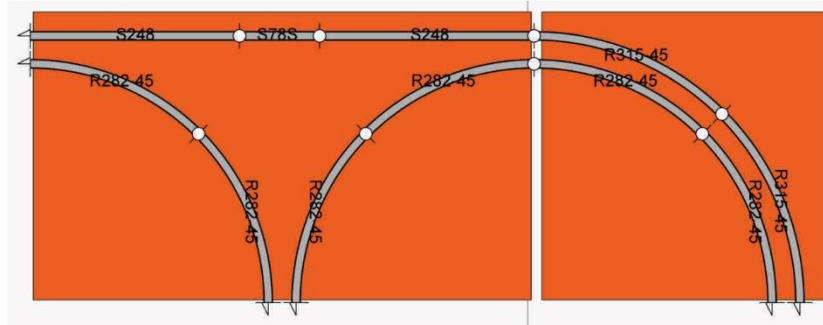


## Recommended Practice

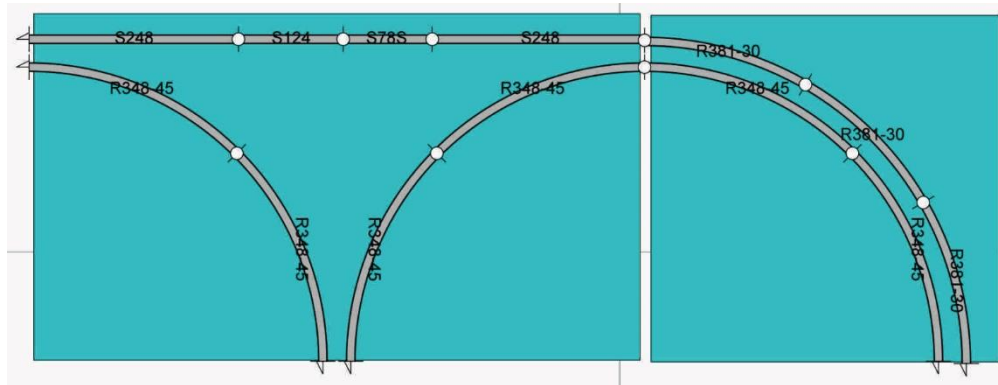
# Mating T-TRAK Corners of Various Radii

T-TRAK currently has four popular sizes of corner modules and their respective "T" modules. They are:

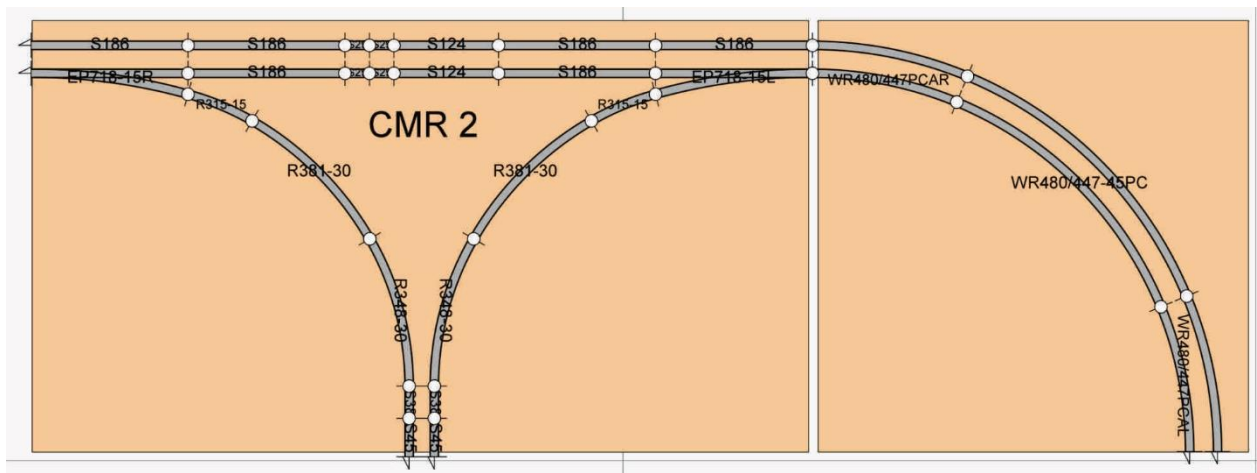
**Small corner and the "Steve Jackson junction" "T" module with 282/315mm radii.**



**Medium corner and "T" module with 348/381mm radii.**

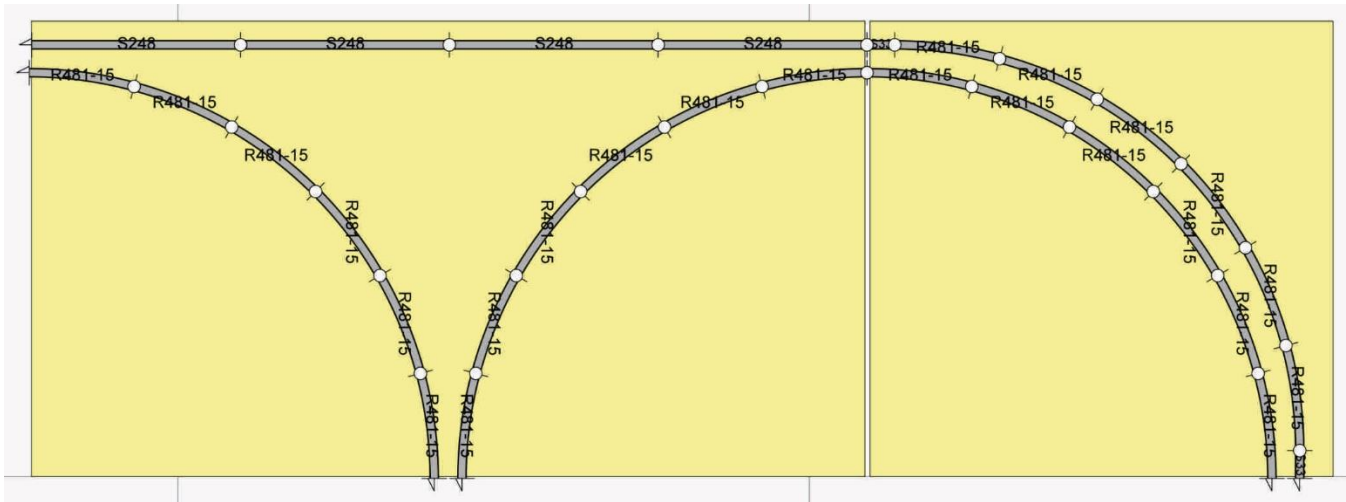


**Large corner and similar large "T" module with optional track with 447/480mm radii.**



**Extra large corner and "T" module with 481/481+33mm radii.**

This corner uses 481mm radius curved track exclusively. Since KATO does not produce a 514mm radius piece of curve track for the outer curve 33mm straight track pieces are added to each end of the 90 degree curve replicating the position of a 514mm curve but with a 481mm radius.

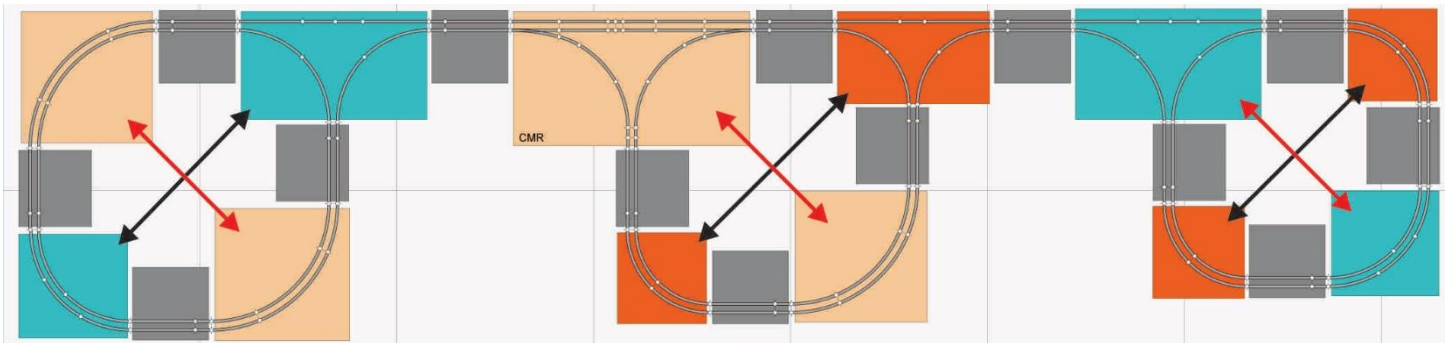


KATO curved track pieces are produced in 33mm radius increments starting with 117mm so other corners of various radii could be created, but these four are the most popular and common. Regardless of the corner radii the procedures outlined here will apply, just the size of the track pieces used may differ.

## Creating Layouts

When creating T-TRAK layouts with a variety of corners and junctions the best way to accommodate them is to use matching corners and "T" modules at all 4 corners of a loop.

Failing that, the second best method is to use matching pairs of corners and/or "T" modules in a diagonal configuration as below, regardless of the size of the matching pairs.



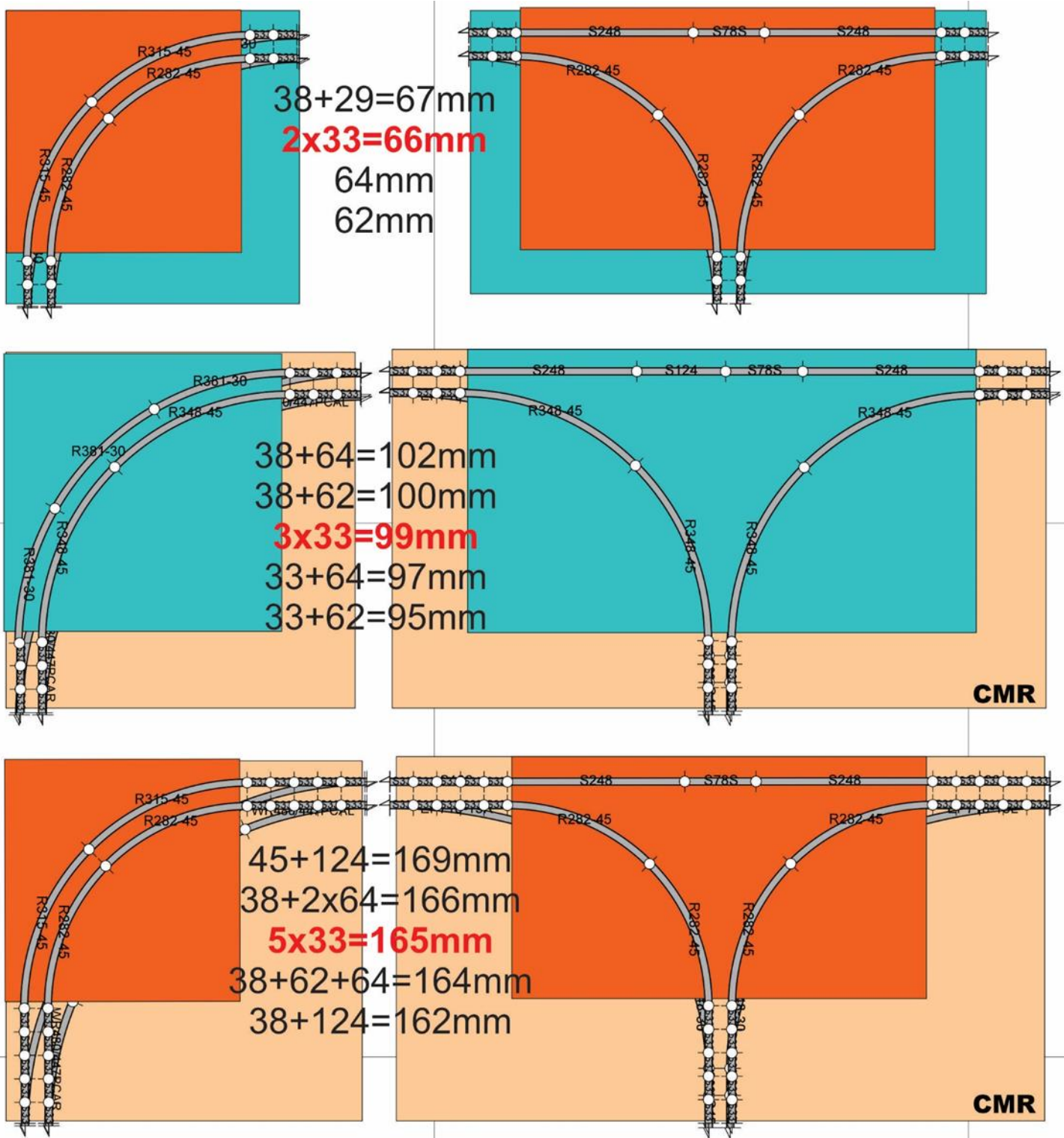
## Mixing and Matching

When the easy options above are not possible, mixing varieties of corners and "T" modules and matching their physical size is the only option left. Since the curved track radii are available in 33mm increments the 33mm straight track piece will be very important as we assemble the layout. The requirement is to make the smaller corner/"T" module match the physical size of the larger corner/"T" module by adding straight track pieces to make up the difference. Since that difference will be in multiples of the 33mm difference in curve radii the 33mm straight track will be used. To avoid using large numbers of track pieces larger pieces may be used that will not be a perfect fit, but will be acceptable.

## Adapter or Filler Track

For the three most common module sets the "perfect" fit of multiple 33mm straight track pieces is shown in RED. For alternate combinations of track pieces the 29mm, 38mm, 62mm and 64mm straight track pieces are available creating optional lengths that are limited to +/- 4mm from the "perfect" length. This allows for the minimum number of track pieces and reduces the possible large number of 33s that might be required. The 4mm "fudge factor" should be acceptable.

KATO Part #	Size	KATO Part #	Size
20-040	62mm	20-042	62mm double
20-020	124mm	20-023	124mm double
20-092	33 & 38mm	20-091	29 & 45mm
20-030	64mm	20-050	78 - 108mm

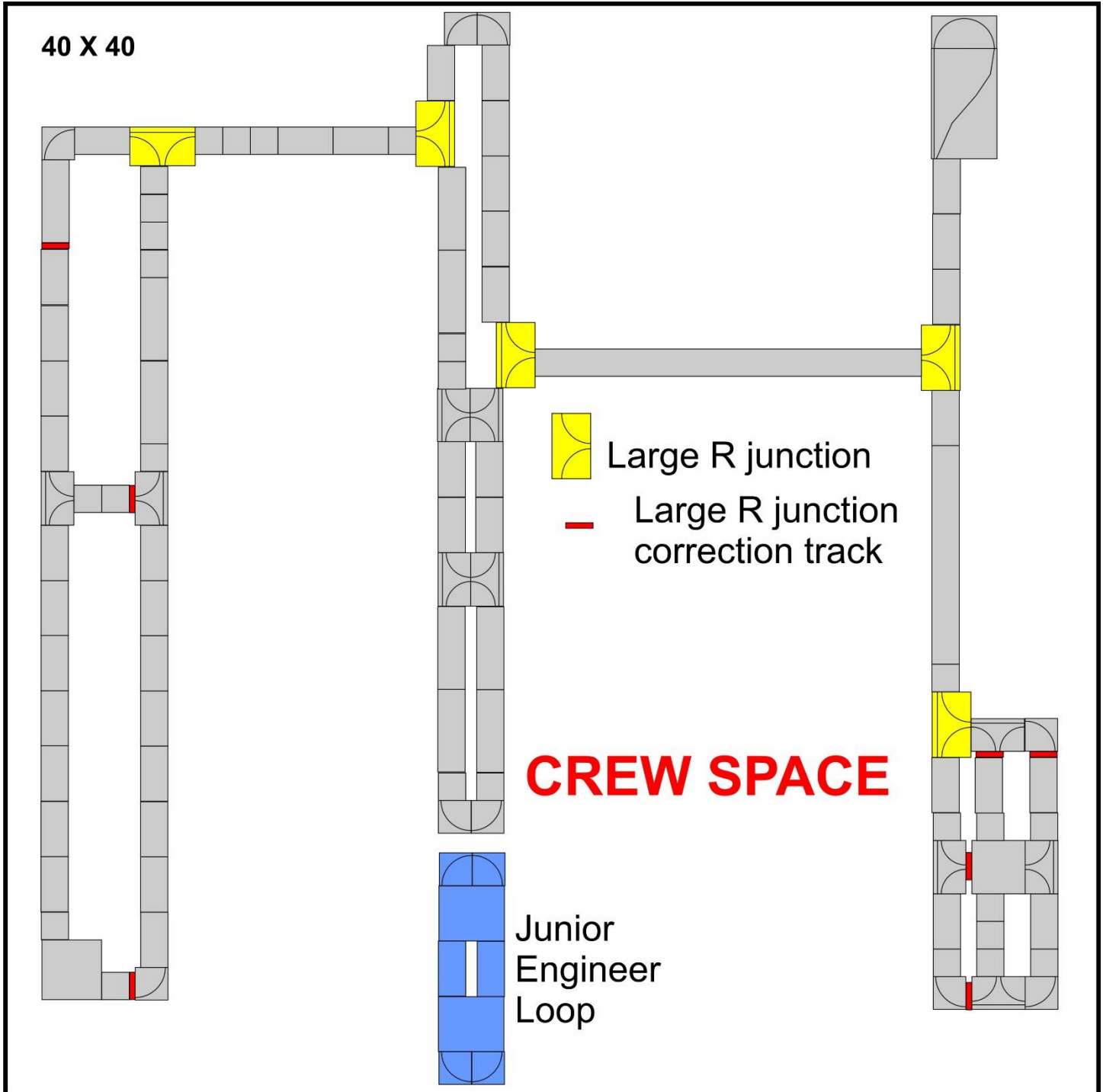


To accommodate the "Extra Large" 481/481+33mm corner and "T" module designs simply add a 33mm straight track piece to the large 19" corners and "T" modules and the group of track pieces needed to accommodate the large 19" corners and "T" modules with the smaller corners and "T" modules.

<b>Module Design</b>	<b>Measurements</b>	<b>Track Required</b>
Small Corner	365mm W x 365mm D 14 3/8 x 14 3/8 in.	2 x 20-110 2 x 20-120
Small "T" Module	596mm W x 365mm D 23 7/16 x 14 3/8 in.	2 x 20-000 1 x 20-030 4 x 20-110 1 x 20-292 38mm
Medium Corner	431mm W x 431mm D 17 x 17 in.	2 x 20-132 3 x 20-140
Medium "T" Module	727mm W x 431mm D 28 9/16 x 17 in.	2 x 20-000 1 x 20-020 1 x 20-030 1 x 20-091 45mm
Large Corner	530mm W x 530mm D 20 7/8 x 20 7/8	1 x 20-185 1 x 20-186R 1 x 20-186L
Large "T" Module	924mm W x 530mm D 36 3/8 x 20 7/8 in.	4 x 20-010 1 x 20-020 2 x 20-150 2 x 20-121 2 x 20-140 2 x 20-130 2 x 20-091 29mm 2 x 20-091 45mm 2 x 20-092 38mm
Large "T" Module Optional	924mm W x 530mm D 36 3/8 x 20 7/8 in.	6 x 20-010 2 x 20-020 1 x 20-203 1 x 20-202 2 x 20-121 2 x 20-140 2 x 20-130 4 x 20-091 29mm 2 x 20-091 45mm 2 x 20-092 38mm
Extra Large Corner	564mm W x 564mm D 22 3/16 x 22 3/16 in.	12 x 20-160 2 x 20-292 33mm
Extra Large "T" Module	992mm W x 564mm D 39 x 22 3/16 in.	12 x 20-160 3 x 20-000 1 x 20-030 1 x 20-010
Extra Large "T" Module Optional	992mm W x 564mm D 39 x 22 3/16 in.	10 x 20-160 5 x 20-000 1 x 20-030 1 x 20-010 1 x 20-020 1 x 20-220 + S60L 1 x 20-221 + S60R
NOTE: All modules 70mm H Double track may be used where optional		

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This is an example of this RP in action. This T-TRAK layout used the medium "T" modules to create a layout that had the outside main track using curves no tighter than the 315mm radius of a small corner outside curve. They replaced small "T" modules that would have placed 282mm curves in the route of the outside track. This plan required the accommodation of 5 medium "T" modules. Since this was before the 33mm straight track pieces were available 62mm or 64mm track pieces were used as the necessary adapter/filler tracks as suggested in this document.



With the increased availability and use of larger corners and "T" modules, track pieces for fillers to accommodate them in layouts will be more necessary. Displayers providing such large modules will be required to inform the layout coordinator of their size and corrective practices necessary to include them. If possible, the module owners should provide the necessary adapter/filler track pieces required.