

SELECTING AN APPROPRIATE RAILING SYSTEM

STEP 1: ASSESS THE SITE

As well as selecting a guardrail design for aesthetic reasons, it is important to consider how the chosen system will fit the proposed site. It is unlikely that any site is actually flat and that only straight runs of guardrail will be required - sites usually include hills, bends and awkward junctions around pedestrian crossings etc.

Guardrail may need to accommodate either inclines or a curved (or angled) kerb line, or a combination of both, as illustrated below. The table on the next page helps with the selection of the correct guardrail to overcome these site variables.



SITE CONDITION	GUARDRAIL TYPE
INCLINED	STEPPED

Horizontal members are plumb level



SIDE VIEW



SITE CONDITION	GUARDRAIL TYPE
INCLINED	RAKED

'Horizontal' members follow pavement incline



SIDE VIEW



SITE CONDITION	GUARDRAIL TYPE
CURVED (OR ANGLED)	SEGMENTED

Overall site curve or changes in angle achieved by straight rail segments



PLAN VIEW



SITE CONDITION	GUARDRAIL TYPE
CURVED (OR ANGLED)	RADIUSED

Rails are radiused so concentric to kerb



PLAN VIEW

Note: in all situations, posts and vertical panel infill bars are manufactured to be installed plumb vertical. We do not recommend that guardrail is installed with the posts perpendicular to an inclined site, i.e. not true vertical.

STEP 2: CHOOSE A SYSTEM

As the table below demonstrates, some guardrail systems fit certain site conditions better than others and we recommend that you carefully consider which system is the most appropriate when making your selection.

If the guardrail that you select will fit your site with 'standard' components only, this will shorten manufacturing lead times and generally speaking will be more cost effective. Also, spare components can be held in stock for replacement purposes at immediate notice rather than made to order - minimising inconvenience and vastly reducing maintenance costs. For a guardrail that requires special components, i.e. those denoted as 'options' in the table below, the opposite may apply.

SITE CONDITIONS (refer to illustrations on pg 112)		GUARDRAIL TYPE (refer to illustrations on pg 112)		GUARDRAIL SYSTEM (refer to index below for full product range available)			
SIDE VIEW	PLAN VIEW	SIDE VIEW	PLAN VIEW	LINX	STRETFORD OKR HKR	ROMNEY HARRG'TN HACKNEY CAST IRON	PGRM
LEVEL	STRAIGHT	LEVEL	STRAIGHT	STANDARD	STANDARD	STANDARD	STANDARD
INCLINED	STRAIGHT	STEPPED	STRAIGHT	STANDARD	OPTION	N/A	STANDARD
INCLINED	STRAIGHT	RAKED	STRAIGHT	N/A	N/A	OPTION	N/A
LEVEL	CURVED (OR ANGLED)	LEVEL	SEGMENTED	STANDARD	STANDARD	N/A	STANDARD
LEVEL	CURVED (OR ANGLED)	LEVEL	RADIUSED	OPTION	OPTION	OPTION	N/A
INCLINED	CURVED (OR ANGLED)	STEPPED	SEGMENTED	STANDARD	OPTION	N/A	STANDARD
INCLINED	CURVED (OR ANGLED)	RAKED	RADIUSED	N/A	N/A	OPTION	N/A
INCLINED	CURVED (OR ANGLED)	STEPPED	RADIUSED	OPTION	OPTION	N/A	N/A

KEY/EXPLANATION

STANDARD These are common components, and may be held as stock items.

OPTION These components are made to order, to precisely fit the site. Site survey information (spot heights and relative positions of posts) is therefore required before manufacture can be commenced.

N/A Guardrail not available in this configuration.

GUARDRAIL SYSTEM INDEX

LINX	LINX 100 LINX 200 LINX 300 LINX 400	pgs 114 - 120, 125 pgs 114 - 121, 125 pgs 114 - 123, 125 pgs 114 - 124
OKR HKR STRETFORD	OKR & HKR STRETFORD 115 STRETFORD 75	pg 133 - 134 pgs 126 - 127 pgs 126 - 127
ROMNEY HARRG'TN HACKNEY CAST IRON	ROMNEY HARRINGTON HACKNEY CAST IRON RANGES	pgs 126 - 128 pgs 129 - 131 pgs 129 - 131 pgs 136 - 139
PGRM	PGRM	pg 132

STEP 3: CHECK VISIBILITY

Further technical information on individual guardrail systems is available on request, including details of the maximum incline and minimum radius that can be achieved by standard components.

PANEL TYPE	PANEL LAYOUT	OPTIMUM SIGHT ANGLE	WHERE USED
V2		2.5° TO 5°	STRAIGHT ROADS MODERATE SPEEDS
V4		5° TO 14°	BENDS. SLOW SPEEDS
V8		MORE THAN 14°	BELLMOUTHS. SITE WHERE VISIBILITY IS NOT THE MAIN REQUIREMENT

