


**RAKE BEAM SECTION PROPERTIES**

RAKE BEAM SECTION PHYSICAL PROPERTIES						
SIZE	D (IN)	B (IN)	L (IN)	T (IN)	WGT (LB/FT)	A (IN <sup>2</sup> )
ER10X14	10.0	5.5/2.5	1.125	0.075	5.100	1.500
EH10X12	10.0	5.5/2.5	1.125	0.102	7.004	2.060

RAKE BEAM SECTION FULL PROPERTIES							
SIZE	I <sub>x</sub> (IN <sup>4</sup> )	r <sub>x</sub> (IN)	I <sub>y</sub> (IN <sup>4</sup> )	r <sub>y</sub> (IN)	J (IN <sup>4</sup> )	C <sub>w</sub> (IN <sup>6</sup> )	r <sub>o</sub> (IN)
ER10X14	22.236	3.893	4.488	1.749	0.002751	77.295	7.203
EH10X12	30.083	3.877	6.036	1.737	0.007076	102.702	7.174

RAKE BEAM SECTION EFFECTIVE PROPERTIES								
SIZE	I <sub>x</sub> (IN <sup>4</sup> )	S <sub>xc</sub> (IN <sup>3</sup> )	S <sub>xt</sub> (IN <sup>3</sup> )	M <sub>n</sub> (K IN)	M <sub>a</sub> (K IN)	V <sub>a</sub> (KIPS)	DEFL. I <sub>x</sub> (IN <sup>4</sup> )	A <sub>e</sub> (IN <sup>2</sup> )
ER10X14 TOP	18.913	3.956	3.623	199.664	119.559	3.737	20.116	0.668
BOTTOM	21.766	3.740	5.206	205.700	123.173	3.737	22.236	0.668
EH10X12 TOP	27.515	6.057	5.042	277.310	166.054	9.737	28.066	1.141
BOTTOM	30.083	5.219	7.102	287.045	171.883	9.737	30.083	1.141

**NOTES:**

- SECTION PROPERTIES ARE CALCULATED IN ACCORDANCE WITH THE 1996 AISI SPECIFICATION AND THE 1999 SUPPLEMENT FOR THE DESIGN OF COLD FORMED STEEL MEMBERS.
- BENDING ALLOWABLES SHOWN MAY BE UTILIZED FOR MEMBERS HAVING THE COMPRESSION FLANGE CONTINUOUSLY FASTENED TO DECK OR SHEATHING.