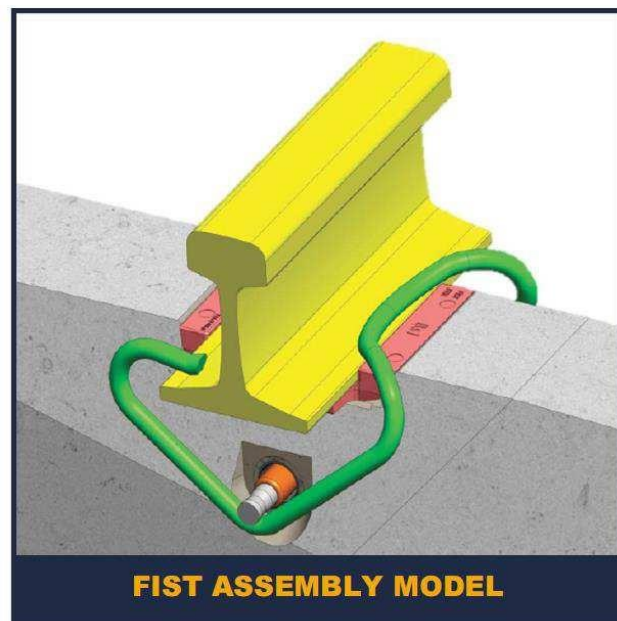
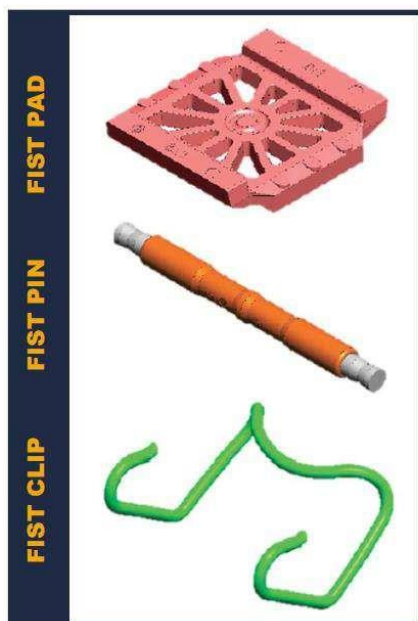




FIST CLIP

The FIST rail fastening system originated in Sweden and is used extensively in the Southern Africa surface railroads with major installations in South Africa, Zimbabwe, Botswana, Swaziland, and Namibia. The system has also been used in South America and Australia. The largest project executed in the Southern African region using the FIST rail fastening system was the Orex (Sishen-Saldanha) heavy haul line, which is 810km in length. The FIST system comprises of a spring steel clip, rail pad, and insulated retaining pin.



FIST GAUGE SETTING TABLE

FIST FASTENING SPECIFICATIONS FOR DIFFERENT GAUGES									
Sleeper	Rail	Clip	Pin	Outer	Inner	Gauge	Inner	Outer	
FY	SAR 60/ UIC 60 / 60E1	FY Blue	FY Blue	G	G	1063	G	G	
		FY Blue	FY Blue	H2	H1	1067	G	G	
		FY Blue	FY Blue	H2	H1	1072	H1	H2	
	SAR 57kg/m	FY Blue	FY Blue	F	F	1068	F	F	
		FY Blue	FY Blue	P1	P2	1070	P2	P1	
	SAR 48kg/m	F4 Red	F4 Black	L1	L2	1065	L2	L1	
		F4 Red	F4 Black	L1	L2	1071	L1	L2	
		F4 Red	F4 Black	L2	L1	1077	L1	L2	
	F4/F1	SAR 57kg/m	F4 Red	F4 Black	E	E	1065	E	E
F4 Red			F4 Black	E	E	1070	D1	D2	
F4 Red			F4 Black	D2	D1	1075	D1	D2	
SAR 50kg/m		F4 Red	F4 Black	A1	A2	1065	A1	A2	
		F4 Red	F4 Black	A2	A1	1070	A1	A2	
SAR 48kg/m		F4 Red	F4 Black	B1	B2	1065	B2	B1	
		F4 Red	F4 Black	B1	B2	1070	B1	B2	
		F4 Red	F4 Black	B2	B1	1075	B1	B2	
SAR 40kg/m		F4 Red	F4 Black	K1	K2	1065	K2	K1	
		F4 Red	F4 Black	B1	B2	1070	B2	B1	
		F4 Red	F4 Black	B1	B2	1075	B1	B2	
		F4 Red	F4 Black	B2	B1	1080	B1	B2	
F3		SAR 57kg/m	F4 Red	F4 Black	D2	D1	1067	D1	D2
		SAR 48kg/m	F4 Red	F4 Black	B2	B1	1067	B1	B2
F2		SAR 57kg/m	F2 Black	F4 Black	DD2	DD1	1067	DD1	DD2
	SAR 48kg/m	F2 Black	F4 Black	BB2	BB1	1067	BB1	BB2	
SIDING	SAR 48kg/m	F4 Red	F4 Black	B1	B2	1065	C2	C1	
		F4 Red	F4 Black	B1	B2	1070	B1	B2	
		F4 Red	F4 Black	B2	B1	1075	B2	B1	
		F4 Red	F4 Black	B2	B1	1080	B1	B2	
		F4 Red	F4 Black	C2	C1	1085	B1	B2	
	SAR 40kg/m	F4 Red	F4 Black	C2	C1	1090	C1	C2	
		F4 Red	F4 Black	C1	C2	1067	C2	C1	
		F4 Red	F4 Black	C1	C2	1072	B2	B1	
		F4 Red	F4 Black	C1	C2	1077	B1	B2	
		F4 Red	F4 Black	B1	B2	1082	B1	B2	
	SAR 30kg/m	F4 Red	F4 Black	B2	B1	1087	B1	B2	
		F4 Red	F4 Black	B2	B1	1092	C1	C2	
		Type 4	F4 Black	N1	N2	1065	N2	N1	
		Type 4	F4 Black	P1	P2	1070	N2	N1	
	SAR 30kg/m	Type 4	F4 Black	P1	P2	1075	P2	P1	
		Type 4	F4 Black	N2	N1	1085	N2	N1	