



Aluminum Floor Mounted Rail Systems



AFMRS1000



AFMRS2000

Knight's Aluminum Floor Mounted Post System is an easy to assemble lightweight alternative to the traditional steel four post system. The channels in the extruded aluminum posts can be used to mount torque monitors, tool holders, keyboards, television screens, tables and more. Each Aluminum Floor Mounted Rail System is designed individually to your application and capacity requirements. A Knight Representative will assist you in selecting and developing alternatives when designing your rail system.

AFMRS1000 Features

- Bridge Type: Single/Dual.
- Runway Rail Type: **RAD7510 or RAD7510 with backer.**
- Max Runway Length: **30 ft. [9144mm].**
- Bridge Rail Type: **RAD7510 / RAD6110* / RAD4110*.**
- Max Bridge Length: **RAD7510: 30 ft. [9144mm].
RAD6110 / RAD4110: 25 ft. [7620mm].**
- Max Post Height: **15 ft. [4572mm]. (to bottom of runway)**
- Integrated runway rails.
- Integrated inspection gate on runways.
- Max Capacity: **Up to 3,000 lbs. [1,360kg].**
- The posts no longer require welded construction which improves delivery time.
- The posts integrated channel design allows for attachment of accessories such as control boxes, FRLs, etc.
- Bolt-Together Construction.
- Easy assembly.

AFMRS2000 Features

- Bridge Type: Single/Dual.
- Runway Rail Type: **RAD7510 / 6110 / 4110.**
- Bridge Rail Type: **RAD7510 / RAD6110* / RAD4110*.**
- Max Bridge Length: **RAD7510: 27 ft. [8229mm].
RAD6110 / RAD4110: 25 ft. [7620mm].**
- Max Post Height: **15 ft. [4572mm]. (to bottom of runway)**
- System is readily "expandable", allowing for the option of continuous runways with multiple bays (see page 2).
- Max Capacity: **Up to 3,000 lbs. [1,360kg].**
- The posts no longer require welded construction which improves delivery time.
- The posts integrated channel design allows for attachment of accessories such as control boxes, FRLs, etc.
- Bolt-Together Construction.
- Easy assembly.

*at reduced capacities.

For more information, please contact a Knight Global representative.





AFMRS1000 Single Rail Bridge Rated Capacities Based upon deflection criteria of L/350

POST SPAN "L"	RUNWAY LENGTH "C"	AFMRS1000 Single Rail Bridge Rated Capacities										
9	10	2855	2590	2365	2050	1755	1515	1315	1150	1015	895	795
10	11	2855	2590	2365	2050	1755	1515	1315	1150	1015	895	795
11	12	2855	2590	2365	2050	1755	1515	1315	1150	1015	895	795
12	13	2855	2590	2365	2050	1755	1515	1315	1150	1015	895	795
13	14	2855	2590	2365	2050	1755	1515	1315	1150	1015	895	795
14	15	2855	2590	2365	2050	1755	1515	1315	1150	1015	895	795
15	16	2855	2590	2365	2050	1755	1515	1315	1150	1015	895	795
16	17	2855	2590	2365	2050	1755	1515	1315	1150	1015	895	795
17	18	2855	2590	2365	2050	1755	1515	1315	1150	1015	895	795
18	19	2855	2590	2365	2050	1755	1515	1315	1150	1015	895	795
19	20	2855	2590	2365	2050	1755	1515	1315	1150	1015	895	795
20	21	2610	2590	2365	2050	1755	1515	1315	1150	1015	895	795
21	22	2340	2335	2330	2050	1755	1515	1315	1150	1015	895	795
22	23	2105	2100	1885	2045	1755	1515	1315	1150	1015	895	795
23	24	1895	1890	1885	1880	1755	1515	1315	1150	1015	895	795
24	25	1710	1705	1700	1695	1690	1515	1315	1150	1015	895	795
25	26	1545	1540	1535	1530	1525	1470	1315	1150	1015	895	795
26	27	1395	1390	1385	1380	1375	1370	1310	1150	1015	895	795
27	28	1260	1255	1250	1245	1240	1235	1230	1150	1015	895	795
28	29	1140	1135	1130	1125	1120	1115	1110	1105	1015	895	795
29	30	1030	1025	1020	1015	1010	1005	1000	935	930	895	795
DIMENSIONS IN FEET		13	14	15	16	17	18	19	20	21	22	23
		10	11	12	13	14	15	16	17	18	19	20

(RAD7510 rail) CAPACITIES IN LBS.

BRIDGE LENGTHS "B" POST SPAN "W"

AFMRS1000 Dual Rail Bridge Rated Capacities Based upon deflection criteria of L/350

POST SPAN "L"	RUNWAY LENGTH "C"	AFMRS1000 Dual Rail Bridge Rated Capacities										
9	10	3000	3000	3000	3000	3000	3000	2630	2300	2030	1790	1590
10	11	3000	3000	3000	3000	3000	3000	2630	2300	2030	1790	1590
11	12	3000	3000	3000	3000	3000	3000	2630	2300	2030	1790	1590
12	13	3000	3000	3000	3000	3000	3000	2630	2300	2030	1790	1590
13	14	3000	3000	3000	3000	3000	3000	2630	2300	2030	1790	1590
14	15	3000	3000	3000	3000	3000	3000	2630	2300	2030	1790	1590
15	16	3000	3000	3000	3000	3000	3000	2630	2300	2030	1790	1590
16	17	3000	3000	3000	3000	3000	3000	2630	2300	2030	1790	1590
17	18	3000	3000	3000	3000	3000	3000	2630	2300	2030	1790	1590
18	19	3000	3000	3000	3000	3000	3000	2630	2300	2030	1790	1590
19	20	2815	2805	2800	2790	2780	2770	2630	2300	2030	1790	1590
20	21	2500	2490	2480	2470	2460	2450	2440	2300	2030	1790	1590
21	22	2220	2210	2200	2195	2185	2175	2165	2155	2030	1790	1590
22	23	1980	1970	1960	1950	1940	1930	1925	1915	1905	1790	1590
23	24	1765	1755	1745	1735	1730	1720	1710	1700	1690	1680	1590
24	25	1575	1565	1555	1550	1540	1530	1520	1510	1500	1490	1485
25	26	1405	1400	1390	1380	1370	1360	1350	1340	1335	1325	1315
26	27	1255	1245	1235	1230	1220	1210	1200	1190	1180	1170	1165
27	28	1120	1110	1100	1090	1085	1075	1065	1055	1045	1035	1025
28	29	995	990	980	970	960	950	940	930	925	915	905
29	30	885	875	865	855	850	840	830	820	810	800	790
DIMENSIONS IN FEET		13	14	15	16	17	18	19	20	21	22	23
		10	11	12	13	14	15	16	17	18	19	20

(RAD7510 rail) CAPACITIES IN LBS.

BRIDGE LENGTH "B" POST SPAN "W"





(EXPANDABLE TO MULTI-BAY LAYOUTS)

POST SPAN "L"
RUNWAY LENGTH "C"

AFMRS2000 Single Rail Bridge Rated Capacities Based upon deflection criteria of L/350

10	13	2855	2590	2365	2050	1755	1515	1315	1150	1015	895	795	705	630	560	500	445	400	355	315	280	245
11	14	2595	2590	2365	2050	1755	1515	1315	1150	1015	895	795	705	630	560	500	445	400	355	315	280	245
12	15	2160	2160	2155	2050	1755	1515	1315	1150	1015	895	795	705	630	560	500	445	400	355	315	280	245
13	16	1825	1820	1815	1810	1755	1515	1315	1150	1015	895	795	705	630	560	500	445	400	355	315	280	245
14	17	1550	1545	1540	1535	1535	1515	1315	1150	1015	895	795	705	630	560	500	445	400	355	315	280	245
15	18	1330	1325	1320	1315	1310	1305	1300	1150	1015	895	795	705	630	560	500	445	400	355	315	280	245
16	19	1145	1140	1135	1130	1125	1120	1120	1115	1015	895	795	705	630	560	500	445	400	355	315	280	245
17	20	990	985	980	975	970	970	965	960	955	895	795	705	630	560	500	445	400	355	315	280	245
18	21	860	855	850	845	840	835	830	830	825	820	795	705	630	560	500	445	400	355	315	280	245
19	22	745	740	740	735	730	725	720	715	710	705	705	700	630	560	500	445	400	355	315	280	245
20	23	650	645	640	635	630	630	625	620	615	610	605	600	595	560	500	445	400	355	315	280	245

(RAD7510 rail) CAPACITIES IN LBS.

DIMENSIONS IN FEET

7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29

BRIDGE LENGTHS "B" FLR. POST CNTRS "W"

POST SPAN "L"
RUNWAY LENGTH "C"

AFMRS2000 Dual Rail Bridge Rated Capacities Based upon deflection criteria of L/350

10	13	3000	3000	3000	3000	3000	3000	2630	2300	2030	1790	1590	1410	1260	1120	1000	890	800	710	630	560	490
11	14	2610	2605	2595	2585	2575	2565	2555	2300	2030	1790	1590	1410	1260	1120	1000	890	800	710	630	560	490
12	15	2140	2130	2120	2115	2105	2095	2085	2075	2030	1790	1590	1410	1260	1120	1000	890	800	710	630	560	490
13	16	1775	1765	1755	1745	1740	1730	1720	1710	1700	1690	1590	1410	1260	1120	1000	890	800	710	630	560	490
14	17	1485	1475	1465	1455	1445	1435	1430	1420	1410	1400	1390	1380	1260	1120	1000	890	800	710	630	560	490
15	18	1250	1240	1230	1220	1210	1200	1195	1185	1175	1165	1155	1145	1135	1120	1000	890	800	710	630	560	490
16	19	1055	1045	1035	1025	1020	1010	1000	990	980	970	960	955	945	935	925	890	800	710	630	560	490
17	20	895	885	875	865	855	850	840	830	820	810	800	790	785	775	765	755	745	710	630	560	490
18	21	760	750	740	730	720	710	705	695	685	675	665	655	645	635	630	620	610	600	590	560	490
19	22	645	635	625	615	605	595	585	575	570	560	550	540	530	520	510	505	495	485	475	465	455
20	23	545	535	525	515	505	495	485	480	470	460	450	440	430	420	415	405	395	385	375	365	355

(RAD7510 rail) CAPACITIES IN LBS.

DIMENSIONS IN FEET

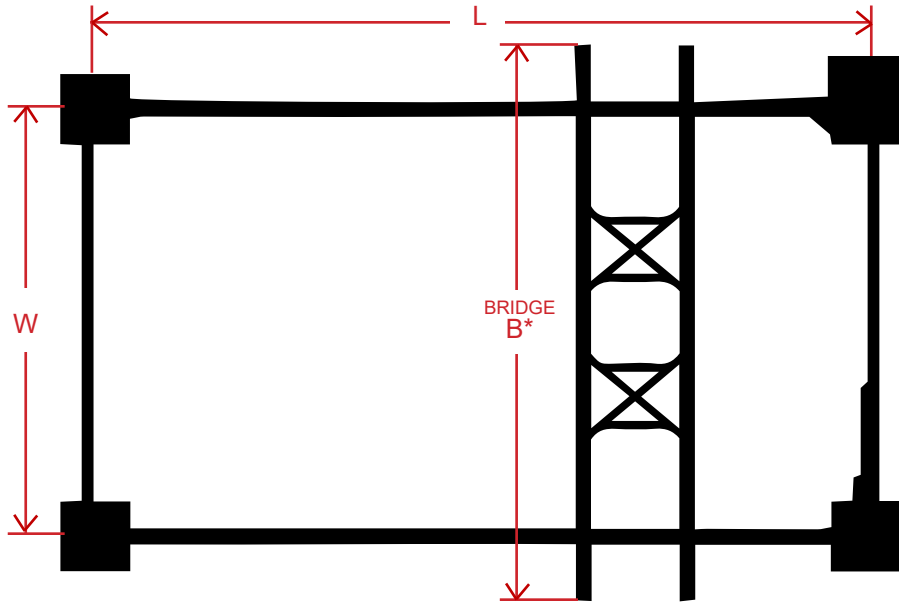
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29

BRIDGE LENGTHS "B" FLR. POST CNTRS "W"



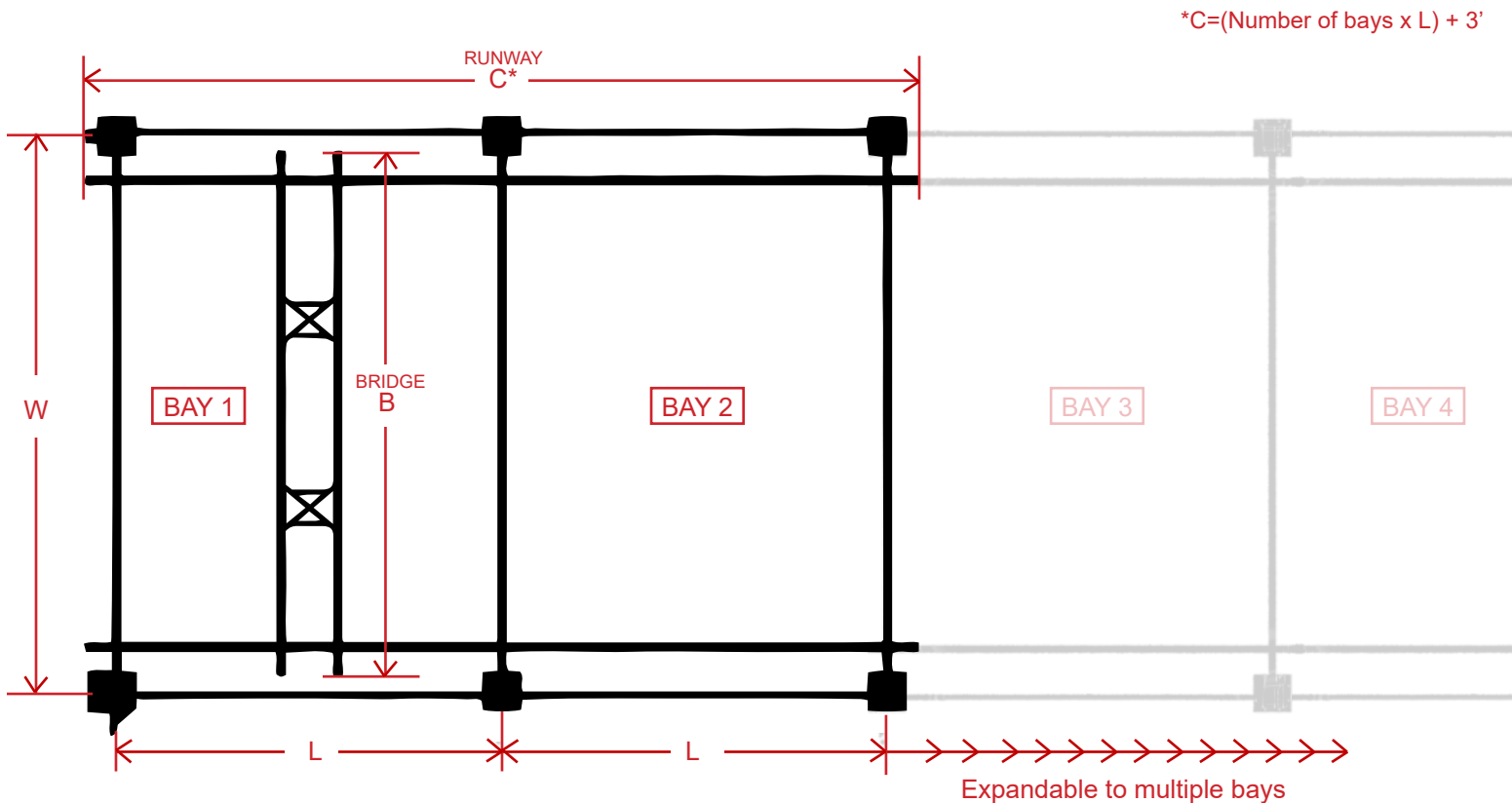


Aluminum Floor Mounted Rail Systems



$*B = (W + 3')$

AFMRS1000



$*C = (\text{Number of bays} \times L) + 3'$

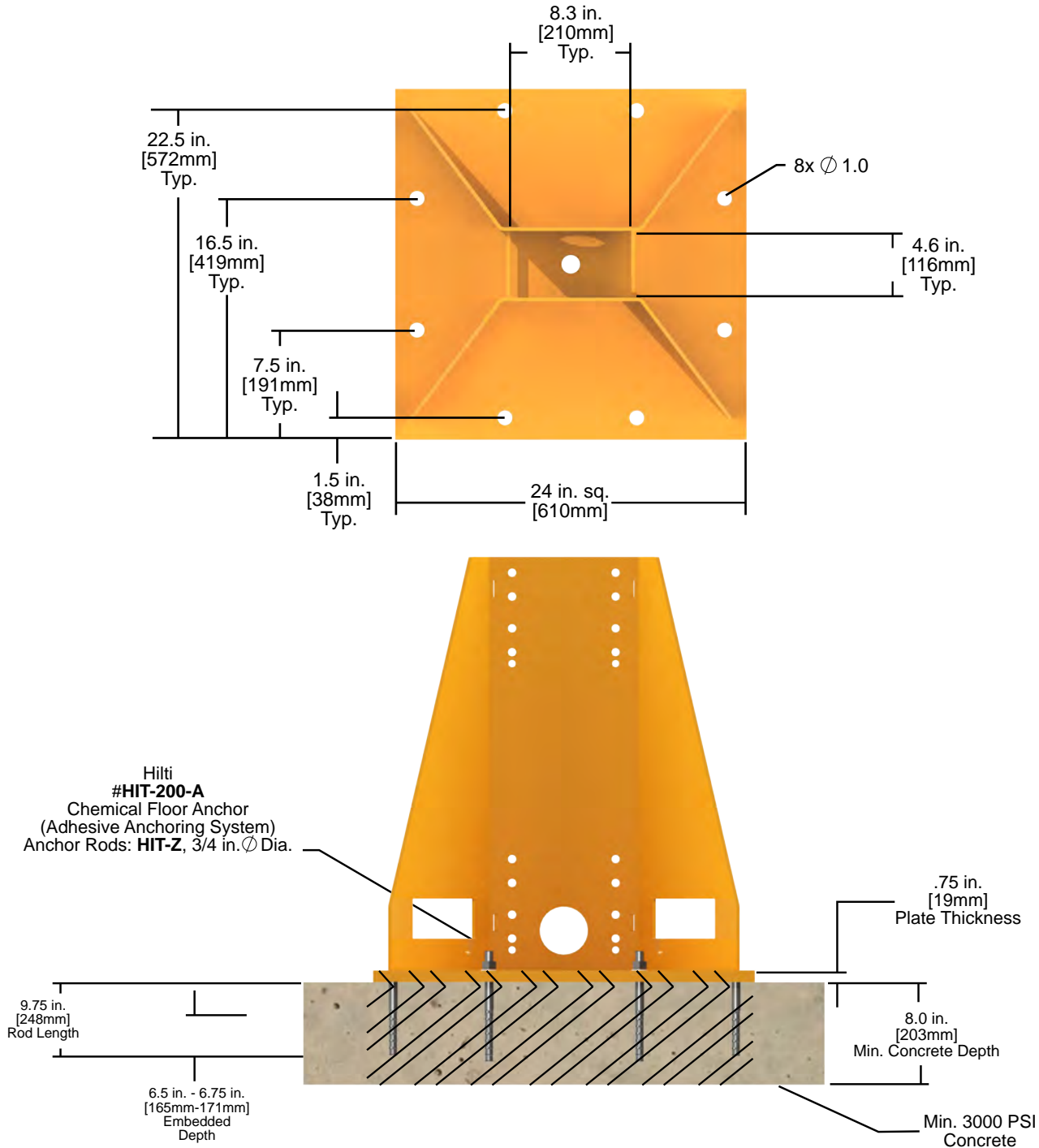
AFMRS2000

For more information, please contact a Knight Global representative.





AFMRS Column Anchoring



MINIMUM CONCRETE RECOMMENDATIONS FOR ALUMINUM FLOOR POST INSTALLATION

- HILTI #HIT 200-A: CHEMICAL FLOOR ANCHOR (ADHESIVE SYSTEM).
- ANCHOR RODS: HIT-Z; Ø 3/4" X 8 1/2" LG.
- EMBEDDED DEPTH OF ANCHORS IN CONCRETE MUST BE 6 1/4" - 6 1/2". (DEPTH OF HOLES MUST NOT EXCEED 6 1/2")
- MINIMUM 8" CONCRETE THICKNESS.
- MINIMUM 3000 PSI CONCRETE.
- PLEASE FOLLOW HILTI ANCHOR INSTALLATION GUIDE PROVIDED WITH EACH SET OF ANCHORS.
- CAPACITY IS BASED ON INSTALLATION OF ANCHORS IN UN-CRACKED AND JOINT FREE CONCRETE.
- PLEASE CHECK WITH PLANT FACILITIES ENGINEERS FOR CONCRETE CONFORMANCE.
- FOR AREAS WITH SEISMIC ZONE REQUIREMENTS OTHER ANALYSIS MAY BE REQUIRED
- MINIMUM 12" FROM EDGE OF BASE PLATE TO ANY FORMED EDGE OF CONCRETE OR FLOOR JOINT.