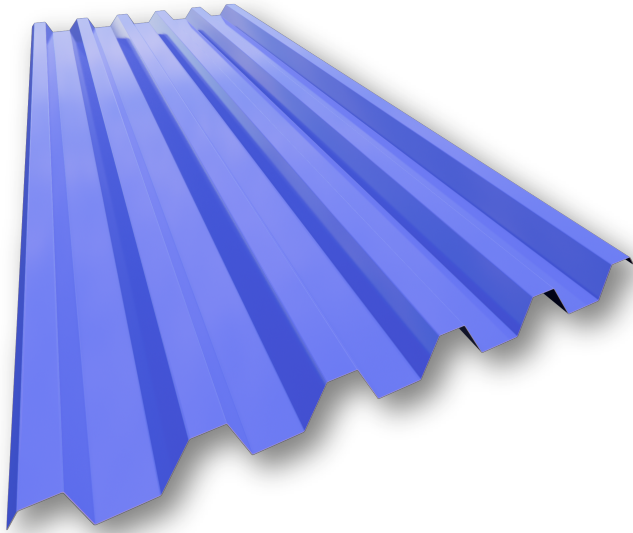


MT-52

PROFILED SHEET



RAW MATERIAL
Steel

THICKNESSES mm (in.)
From 0.5 to 1.2
(0.019-0.047)

FINISH
Pre-painted/Galvanized

USEFUL WIDTH
895 mm (35.24 in.)

	THICKNESS mm (in.)					
	0.50 (0.019)	0.60 (0.023)	0.70 (0.027)	0.80 (0.031)	1.00 (0.039)	1.20 (0.047)
P (kp/m²)	5.10	6.12	7.14	8.16	10.20	12.24
I (cm⁴/m)	26,398	31,672	36,945	42,217	52,755	63,286
W (cm³/m) - side A	7,545	9,671	11,968	14,427	19,790	24,027
W (cm³/m) - side B	7,161	9,211	11,438	13,831	19,182	23,929

P=profile weight per square meter I=profile inertia per linear meter W=resistant module profile per linear meter



DESCRIPTION AND APPLICATION

This Hiansa sheet has a 52 mm (2.05 in.) high-ribbed form with thicknesses up to 1.2 mm (0.047 in.). Its useful width is 895 mm (35.24 in.) and its length ranges between 1600 mm (62.99 in.) and 14,000 mm (551.18 in.). Other thicknesses, widths and lengths may be supplied on request. Its finish can be galvanized, aluzinc and pre-painted in a variety of colors. To facilitate mounting, this sheet can be provided with holes drilled 3 mm in diameter, 5 mm between shafts and staggered 60°.

If required by the project, it can also be provided curved. In addition, because it has great resistance, it is an ideal profile to be applied as lost formwork.



USE							
Roof SANDWICH panel	Roof SANDWICH panel	Roof DECK panel	SIMPLE façade	Façade SANDWICH panel	Façade SANDWICH panel	Interior	Lost Formwork
Interior Profile	Exterior Profile	Base Profile		Interior Profile	Exterior Profile	False Ceilings	
👍	👍	👍	👍	👍	👍	👍	👍

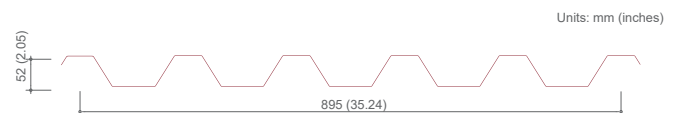
GEOMETRIC SPECIFICATIONS

APPLIED STANDARD

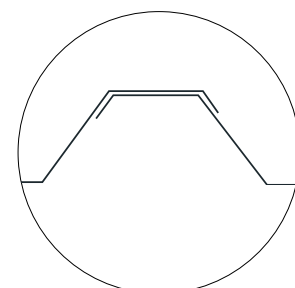
Geometric Specifications			
Characteristic	Value	Units	Tolerance / Standard
Profile thickness (h)	52 (2.05)	mm (in.)	±1.5 EN 508-1
Thickness of stiffeners	0	mm	+3/-1 EN 508-1
Wave Pitch	179	mm	±3.0 EN 508-1
Width of the ridge and valley	45.4/109	mm	+4/-1 EN 508-1
Useful width (w)	895 (35.24)	mm (in.)	(±0.1 · h) and ≤15 EN 508-1
Bending radius (r)	3	mm	±2.0 EN 508-1
Length (l)	1600 (62.99) to 14,000 (551.18)	mm (in.)	+20/-5 EN 508-1

Ref. Standard	Description
EN 508-1	Products for sheet metal roofing and cladding: Specify for self-supporting steel sheet products. Part 1: steel.
EN 10143	Sheets and strips of steel with continuous metal coating by hot dipping. Dimensional and shape tolerances.
EN 10169	Flat steel products, continuous coated with organic materials (pre-painted). Technical supply conditions.
EN 10346	Flat steel products, continuous coated by hot dipping. Technical supply conditions.
EN 14782	Self-supporting metal sheets for covering and cladding of roofs and façades. Product specifications and requirements.

Features of the Profile			
Characteristic	Value	Units	Tolerance / Standard
Deviation from straightness	≤ to the tolerance	mm	±2/ml (max.10) EN 508-1
Deviation from quadrature	≤ to the tolerance	mm	≤ 0.005*w EN 508-1
Deviation of the side overlap	≤ to the tolerance	mm	±2 s/500 mm EN 508-1
Radius and angles of curvature	--	mm	-- EN 508-1
Sheet thickness	0.5 to 1.2	mm	UNE 10143
Type of steel	S220GD to S320GD		UNE 10346
Changes in measurements	12 x 10 ⁻⁶ K		UNE 14782
Water resistance	Pass		UNE 14782
Hazardous substance emissions		No emissions	
Behavior against fire	Broof (t1)		RD 110/2008
Galvanized coating			UNE 10346
Pre-painted coating			UNE 10169
Fire resistance			Class A1



SECTION PROFILE



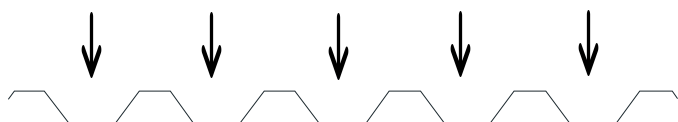
OVERLAP DETAIL

RESISTANCE TABLES

FAÇADES

STEEL S220GD - YIELD STRENGTH 220 N/mm²
 ADMISSIBLE LOADS (kp/m²) ACCORDING TO DISTANCE BETWEEN PURLINS (m)

PRESSURE LOAD																1 OPENING																PRESSURE LOAD															
4,00	3,80	3,60	3,40	3,20	3,00	2,80	2,60	2,40	2,20	2,00	1,80	1,60	1,40	1,20	1,00	in (mm)	1,00	1,20	1,40	1,60	1,80	2,00	2,20	2,40	2,60	2,80	3,00	3,20	3,40	3,60	3,80	4,00															
19	24	30	38	47	59	75	96	125	166	206	256	327	429	588	851	0,50	718	499	366	280	221	179	148	121	96	76	62	51	43	36	31	26															
24	30	37	46	58	72	92	118	153	202	266	331	422	554	758	1097	0,60	1092	758	557	426	337	273	217	167	131	105	86	70	59	49	42	36															
28	35	44	55	68	86	109	139	181	239	322	408	520	683	935	1352	0,70	1344	933	685	524	414	335	262	202	159	127	103	85	71	60	51	44															
33	41	51	64	80	100	127	163	211	279	376	499	636	835	1142	1651	0,80	1607	1116	820	627	495	401	308	238	187	150	122	100	84	70	60	51															
44	54	67	83	104	130	165	211	273	361	487	650	828	1087	1486	2148	1,00	2160	1500	1102	843	666	539	405	312	245	196	160	131	110	92	78	67															
55	68	84	105	130	163	206	263	341	450	607	795	1012	1328	1816	2625	1,20	2708	1880	1381	1057	835	667	501	386	303	243	197	163	136	114	97	83															
PRESSURE LOAD																2 OPENINGS																PRESSURE LOAD															
4,00	3,80	3,60	3,40	3,20	3,00	2,80	2,60	2,40	2,20	2,00	1,80	1,60	1,40	1,20	1,00	in (mm)	1,00	1,20	1,40	1,60	1,80	2,00	2,20	2,40	2,60	2,80	3,00	3,20	3,40	3,60	3,80	4,00															
36	40	46	53	61	71	82	97	115	139	170	213	271	357	490	710	0,50	859	597	438	335	265	214	177	149	127	109	95	83	74	66	59	53															
57	64	73	83	95	110	128	150	179	215	262	326	416	546	748	1082	0,60	1108	769	565	432	341	276	228	192	163	141	122	108	95	85	76	69															
71	80	91	103	118	136	158	186	220	265	323	402	512	673	921	1331	0,70	1364	947	696	532	420	340	281	236	201	173	151	133	117	105	94	85															
86	96	109	124	142	164	190	223	264	317	387	481	613	805	1102	1593	0,80	1665	1156	849	650	513	416	343	288	246	212	184	162	143	128	115	103															
116	131	148	168	192	222	257	301	356	428	522	648	825	1084	1482	2143	1,00	2166	1504	1104	845	668	541	447	375	319	275	240	210	186	166	149	134															
147	165	187	212	242	278	323	378	448	537	655	814	1036	1360	1859	2687	1,20	2646	1837	1349	1033	816	661	546	458	390	336	293	257	228	203	182	164															
PRESSURE LOAD																3 OPENINGS																PRESSURE LOAD															
4,00	3,80	3,60	3,40	3,20	3,00	2,80	2,60	2,40	2,20	2,00	1,80	1,60	1,40	1,20	1,00	in (mm)	1,00	1,20	1,40	1,60	1,80	2,00	2,20	2,40	2,60	2,80	3,00	3,20	3,40	3,60	3,80	4,00															
45	53	60	68	78	90	105	124	147	176	215	268	342	449	615	889	0,50	1074	746	548	419	331	268	222	186	158	137	117	97	81	68	58	50															
55	66	80	97	119	141	163	191	226	271	330	410	522	686	938	1355	0,60	1385	961	706	540	427	346	286	240	204	176	153	133	111	94	79	68															
66	79	95	115	141	174	201	235	279	334	407	506	643	844	1154	1667	0,70	1705	1184	870	666	526	426	352	295	252	217	189	161	134	113	96	82															
77	92	111	135	165	204	241	282	334	400	488	605	770	1011	1381	1995	0,80	2082	1446	1062	813	642	530	429	361	307	265	230	189	158	133	113	97															
100	120	144	175	214	264	326	381	450	539	657	815	1037	1360	1857	2952	1,00	2707	1880	1381	1057	835	676	558	469	400	344	300	248	207	174	148	127															
125	150	180	219	267	329	409	478	565	677	824	1023	1300	1705	2329	3364	1,20	3308	2297	1687	1291	1020	826	682	573	488	421	366	307	256	216	183	157															



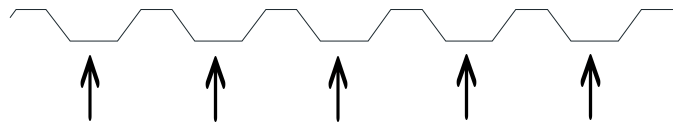
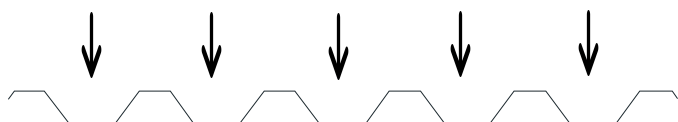
Permissible service loads, uniformly distributed in kg/m². The tables have been obtained based on a calculation methodology established in accordance with the provisions of the standard EUROCODE 3-Part 1-3. These results comply with the Ultimate Limit States of normal and tangential stresses prescribed in said standards and with a limitation of the Serviceability Limit State for deformations of L/200.

RESISTANCE TABLES

ROOFS - side "A"

STEEL S220GD - YIELD STRENGTH 220 N/mm²
ADMISSIBLE LOADS (kp/m²) ACCORDING TO DISTANCE BETWEEN PURLINS (m)

PRESSURE LOAD																1 OPENING																PRESSURE LOAD									
4.00	3.80	3.60	3.40	3.20	3.00	2.80	2.60	2.40	2.20	2.00	1.80	1.60	1.40	1.20	1.00	in (mm)	1.00	1.20	1.40	1.60	1.80	2.00	2.20	2.40	2.60	2.80	3.00	3.20	3.40	3.60	3.80	4.00									
21	56	31	38	46	57	72	91	117	144	175	217	276	362	495	715	0.50	864	602	443	340	270	219	180	140	111	90	74	62	52	45	39	34									
30	36	44	53	65	80	99	126	161	211	268	332	422	552	754	1088	0.60	1114	775	571	438	347	282	219	170	135	109	90	75	64	55	47	41									
37	44	53	64	78	96	120	152	195	255	330	409	519	680	927	1338	0.70	1371	954	703	539	427	343	260	201	160	129	107	89	75	65	56	49									
43	52	63	76	92	114	142	179	230	301	395	489	621	813	1110	1601	0.80	1673	1164	857	658	521	400	302	235	186	151	124	104	88	75	65	57									
58	69	83	100	122	150	187	236	302	395	529	658	835	1094	1492	2152	1.00	2176	1514	1114	855	678	516	390	300	240	194	160	134	113	97	84	73									
72	86	103	124	151	186	231	292	374	489	655	826	1048	1372	1871	2699	1.20	2659	1849	1361	1045	828	642	485	377	299	242	199	166	140	120	104	91									
PRESSURE LOAD																2 OPENINGS																PRESSURE LOAD									
4.00	3.80	3.60	3.40	3.20	3.00	2.80	2.60	2.40	2.20	2.00	1.80	1.60	1.40	1.20	1.00	in (mm)	1.00	1.20	1.40	1.60	1.80	2.00	2.20	2.40	2.60	2.80	3.00	3.20	3.40	3.60	3.80	4.00									
49	55	62	70	80	91	105	123	145	173	211	261	331	434	593	856	0.50	723	504	371	285	226	184	153	129	111	96	84	75	67	60	54	49									
64	71	80	91	103	118	136	159	187	224	272	337	428	560	764	1103	0.60	1098	764	563	432	343	279	231	195	167	145	127	112	100	90	81	74									
79	88	99	112	127	145	168	196	231	276	335	415	527	690	942	1359	0.70	1351	940	392	531	421	342	284	240	205	178	156	138	122	110	99	90									
97	108	122	137	156	178	205	239	282	337	410	507	644	843	1150	1659	0.80	1615	1124	828	635	504	409	339	286	245	212	186	164	146	131	118	108									
127	141	158	179	203	232	268	312	367	439	533	660	838	1097	1496	2158	1.00	2170	1510	1112	853	676	549	455	384	329	285	249	220	196	176	159	144									
155	173	194	218	248	284	327	381	449	536	651	806	1024	1340	1828	2637	1.20	2720	1892	1393	1069	847	688	570	481	411	356	312	275	245	220	198	180									
PRESSURE LOAD																3 OPENINGS																PRESSURE LOAD									
4.00	3.80	3.60	3.40	3.20	3.00	2.80	2.60	2.40	2.20	2.00	1.80	1.60	1.40	1.20	1.00	in (mm)	1.00	1.20	1.40	1.60	1.80	2.00	2.20	2.40	2.60	2.80	3.00	3.20	3.40	3.60	3.80	4.00									
45	53	63	76	92	113	133	155	182	218	264	327	415	544	742	1070	0.50	903	629	463	355	282	229	190	160	137	119	104	92	82	74	67	60									
62	74	88	105	127	149	171	200	235	281	341	422	536	701	957	1380	0.60	1372	954	702	539	427	347	288	243	207	180	157	137	115	98	84	73									
75	89	106	127	154	183	211	246	290	346	420	520	660	864	1179	1700	0.70	1687	1173	864	663	525	426	353	298	255	221	193	162	136	116	99	86									
89	105	125	150	181	222	259	301	355	423	514	636	807	1056	1439	2076	0.80	2017	1403	1033	792	627	510	422	356	304	263	227	189	159	135	116	100									
117	139	165	197	239	292	337	392	461	551	668	827	1049	1373	1872	2700	1.00	2710	1885	1387	1064	843	684	567	478	408	353	293	243	205	174	149	129									
146	172	204	245	296	357	411	479	564	673	817	1011	1282	1678	2288	3299	1.20	3397	2362	1739	1334	1056	857	710	599	512	443	364	302	254	216	185	161									



Permissible service loads, uniformly distributed in kg/m². The tables have been obtained based on a calculation methodology established in accordance with the provisions of the standard EUROCODE 3-Part 1-3. These results comply with the Ultimate Limit States of normal and tangential stresses prescribed in said standards and with a limitation of the Serviceability Limit State for deformations of L/200.