



 **NUHPANEL**

exceptional
solutions for
the toughest
conditions





About Nuhpanel

Nuhpanel was founded in 1996 by NuhGroup, which unites over 40 years of experience in construction with a strong industrial culture. Working to international standards under expert and experienced teams, with an annual capacity of 5 million m2, two continuous production lines and cooling technology, our company is the largest sandwich panel manufacturer in Turkey under a single roof in terms of production capacity.

Manufacturing to high quality standards with the priorities of Turkish industry and construction in mind, Nuhpanel provides insulation solutions across countless applications with polyurethane (PUR), polyisocyanurate (PIR) and rock wool cored membrane, non-membrane and acoustic sandwich panels for roofing, walls, cold rooms, doors, shipbuilding and self-insulated air ducts (NKS).

Ranked among the top 3 panel manufacturers in Turkey, we take pride in our uninterrupted exports to 40 countries, including Azerbaijan, Iraq, Iran, Romania, Russia, Libya, Algeria, Armenia, Cyprus, Qatar, Moldova, Ukraine, Kazakhstan, Georgia, Uzbekistan, Syria, Sudan, Egypt, Bulgaria, Turkmenistan, as well as African, Arab and Balkan countries.

At Nuhpanel we will continue to give priority to production to international standards and to R&D, to improve ourselves continuously, and to pursue our forward looking activities with great enthusiasm and care.

Our Mission

At Nuhpanel our mission is to offer solutions that will shape the industry: high quality products and services built on the latest technology, a well trained workforce and management team, and a consistently customer focused approach.

Our Vision

Through the domestic manufacturing we carry out with our advanced R&D structure, we aim to move one step further every day, contributing to the Turkish economy with a vision of creating innovative solutions.

Our R&D Policy

Our strongest motivation in R&D is our passion for the new and the innovative: doing what has not been done before, and bringing you the best and the newest.



Equivalences between TS EN 13501 and TS 1263 by reaction to fire class of construction products

Reaction to Fire Classes for Construction Products Excluding Floorings (according to TS EN 13501)	
Fire Class	Definition
A1	Class A1 materials do not contribute to fire at any stage of combustion, including a fully developed fire. They are therefore automatically deemed to satisfy all the requirements specified for the lower classes.
A2	Satisfies the criteria specified for Class B according to TS EN 13823. In addition, under fully developed fire conditions these materials must not contribute significantly to the fire load or fire growth.
B	Satisfies more demanding requirements in addition to the criteria specified for Class C.
C	Satisfies more demanding requirements in addition to the criteria specified for Class D. In addition, lateral flame spread under thermal attack from a single burning item must remain limited.
D	Materials satisfying the Class E criteria that resist a small flame attack for a longer period without significant flame spread. In addition, they must withstand thermal attack from a single burning item with sufficiently contained and limited heat release.
E	Materials that resist a small flame attack for a short period without significant flame spread.
F	Materials for which no fire performance has been determined and which are not classified as A1, A2, B, C, D or E.
Additional Classifications for Smoke Production	
s3	No limitation in terms of smoke production
s2	Both the rate of smoke growth and the total smoke production are limited
s1	Satisfies more demanding criteria than s2
Additional Classifications for Flaming Droplets/Particles	
d2	No limitation
d1	No flaming droplets/particles beyond a specified period
d0	No flaming droplets/particles at all

Equivalences of Reaction to Fire Classes for Construction Products Excluding Floorings (1)		
Combustibility of the Material	according to TS EN 13501-1 ⁽²⁾	TS 1263
Non-combustible	A1	A1
Hardly Combustible	A2 - s1, d0	A2
Hardly Flammable	B, C - s1, d0	B1
	A2 - s2, d0	
	A2, B, C - s3, d0	
	A2, B, C - s1, d1	
	A2, B, C - s1, d2	
(at least)	A2, B, C - s3, d2	B2
Normally Flammable	D - s1, d0	
	D - s2, d0	
	D - s3, d0	
	E	
(at least)	D - s1, d2	
	D - s2, d2	
	D - s3, d2	
(at least)	E - d2	
Easily Flammable	F	B3

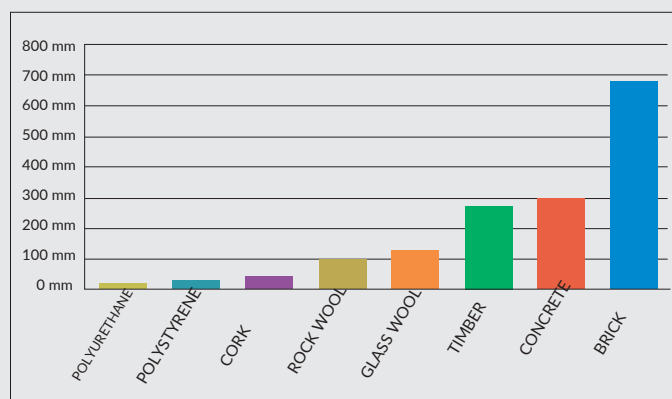
(1) These tables show the material reaction to fire classes given in TS EN 13501-1 and in TS 1263, based on the combustibility of the material. For a construction product carrying a reaction to fire class given in TS 1263 to be treated as equivalent to a class given in TS EN 13501-1, that product must satisfy the test standard conditions of the relevant class specified in TS EN 13501-1.

(2) Harmonised European classes established by the relevant EU commission decisions within the scope of the Construction Products Directive (89/106/EEC), with which construction products subject to those standards must comply.

Our Advantages

Polyurethane panels manufactured by NUH PANEL;

- Accommodate the thermal expansion of the metal facings,
- Provide better adhesion between the metal and the foam core,
- Have a low dusting rate and a flexible structure.



Thicknesses of various materials providing the same thermal insulation

PUR PROPERTIES

FIRE CLASS	B-s2-d0
THERMAL CONDUCTIVITY COEFFICIENT	0.019 W/mK

PIR PROPERTIES

FIRE CLASS	B-s2-d0
THERMAL CONDUCTIVITY COEFFICIENT	0.022 W/mK

ROCK WOOL PROPERTIES

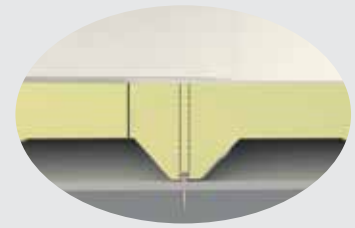
FIRE CLASS	A2-s1-d0
THERMAL CONDUCTIVITY COEFFICIENT	0.036 W/mK

THERMAL CONDUCTIVITY (R) OF MATERIAL AT 40 kg/CBM AND 2.5 cm

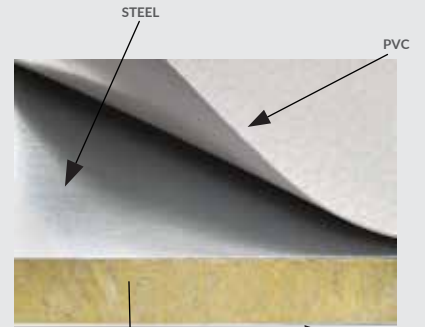
POLYURETHANE (PUR)	0.019
POLYSTYRENE	0.022
ROCK WOOL	0.036



POLYURETHANE (PIR / PUR)



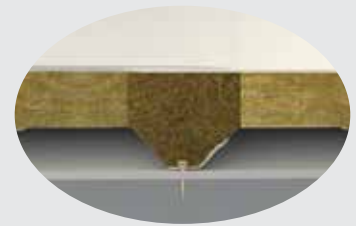
POLYURETHANE (PUR / PIR)



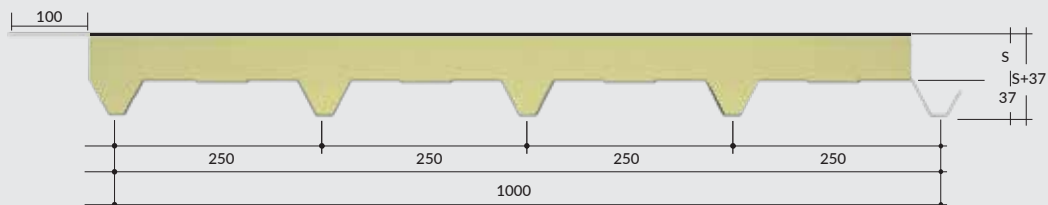
PVC-TO-STEEL LAMINATION SYSTEM



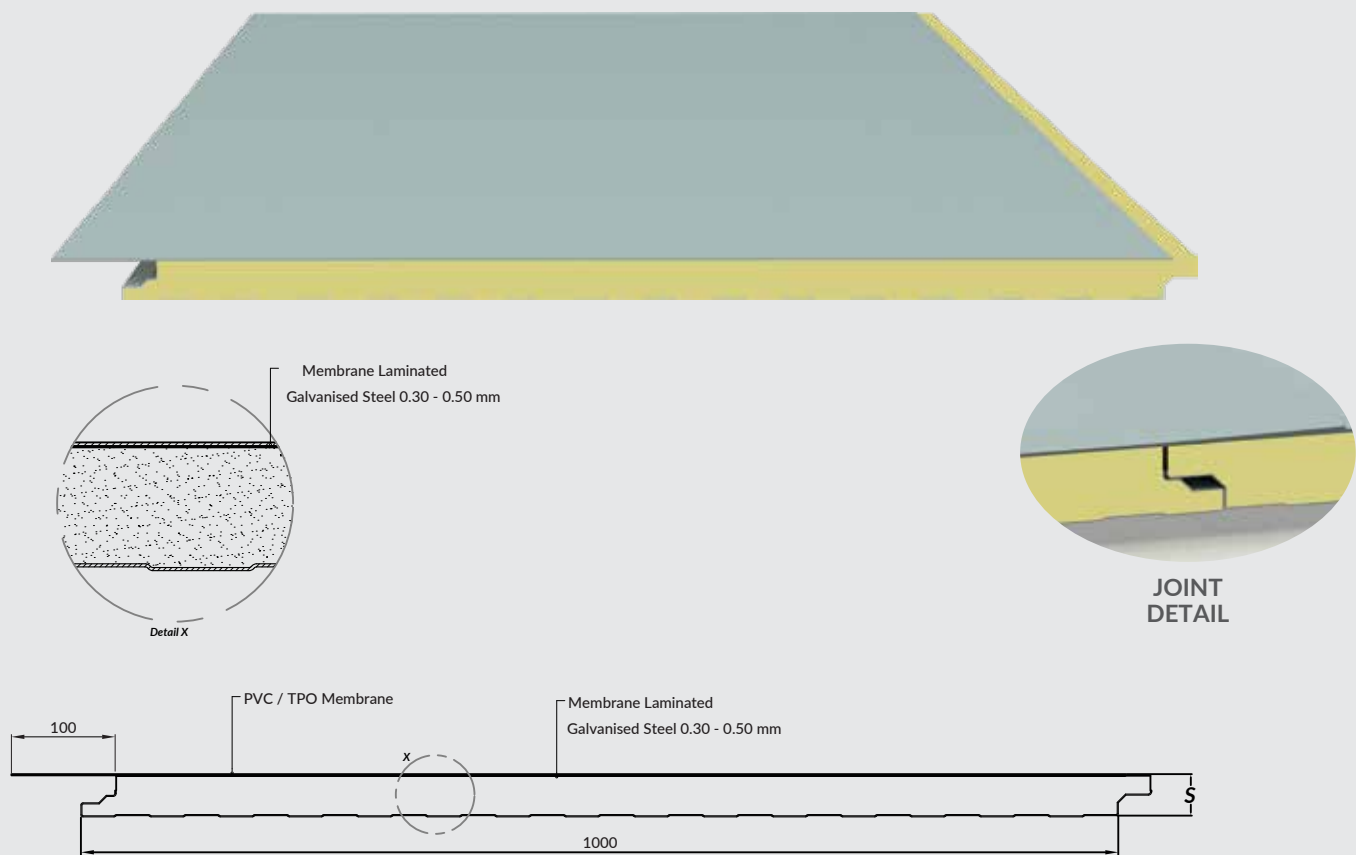
REINFORCED ROCK WOOL



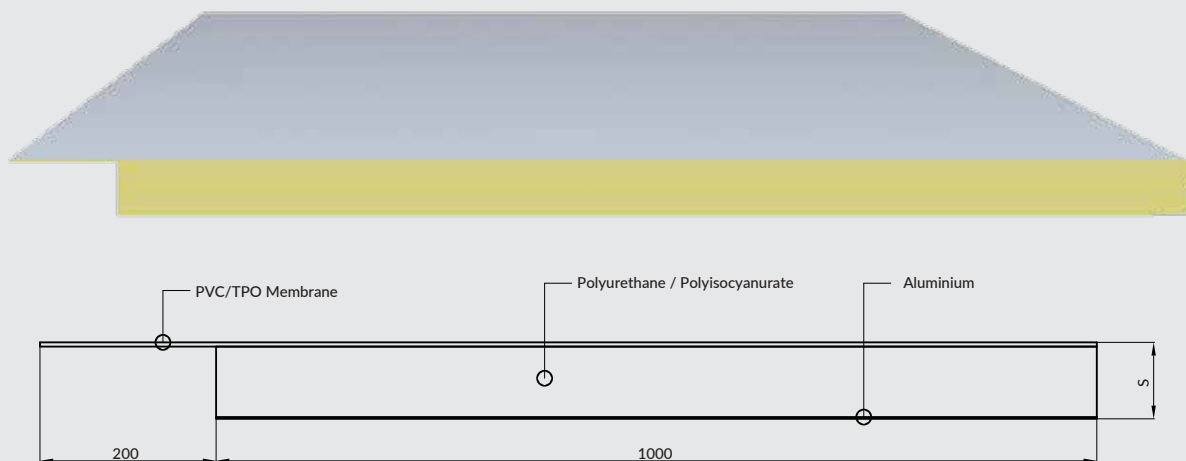
ROCK WOOL



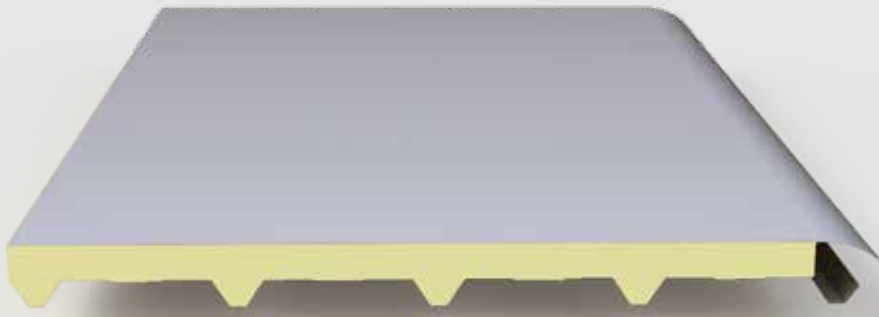
TECHNICAL SPECIFICATIONS			NRPS SSM - NRPS STSM																
INSULATION THICKNESS			40 - 50 - 60 - 70 - 80 - 100 - 120 mm																
MAXIMUM THERMAL CONDUCTIVITY			POLYURETHANE 0.019 W / m K - ROCK WOOL 0.036 W / m K																
FIRE CLASS			ACCORDING TO TS EN 13501-1 POLYURETHANE B s2 d0 - ROCK WOOL A2 s1 d0																
DENSITY			POLYURETHANE 40 kg/m³ (±2) - ROCK WOOL 100 kg/m³ (±10%) - FILLED LIP 130 kg/m³ (±10)																
NRPS SSM			LOAD BEARING TABLE							NRPS STSM			LIMIT VALUE (L/200)						
INSULATION THICKNESS	INNER SHEET	1.2 MM PVC LAMINATED STEEL	100	150	200	250	300	350	400	INSULATION THICKNESS	INNER SHEET	1.2 MM PVC LAMINATED STEEL	100	150	200	250	300	350	400
			DISTRIBUTED LOAD (P = KG/M²)										DISTRIBUTED LOAD (P = KG/M²)						
40	0.50	0.40	286	224	192	171	156	-	-	40	0.50	0.40	263	203	173	154	141	-	-
50	0.50	0.40	317	249	211	184	167	-	-	50	0.50	0.40	294	228	192	167	152	-	-
60	0.60	0.40	364	273	217	196	175	-	-	60	0.60	0.40	341	252	208	179	160	-	-
70	0.60	0.40	383	285	243	219	193	-	-	70	0.60	0.40	360	264	224	202	178	-	-
80	0.70	0.40	395	306	267	228	204	-	-	80	0.70	0.40	372	285	248	211	186	-	-
100	0.70	0.40	418	332	291	241	209	-	-	100	0.70	0.40	395	312	272	224	194	-	-
120	0.80	0.40	440	355	308	254	220	-	-	120	0.80	0.40	417	334	289	237	205	-	-



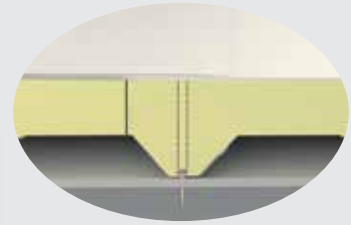
RENOBOARD ROOF RENOVATION PANEL



TECHNICAL SPECIFICATIONS			NRWP SSM - RENOBOARD									
INSULATION THICKNESS			40 - 50 - 60 - 70 - 80 - 100 mm									
MAXIMUM THERMAL CONDUCTIVITY			POLYURETHANE 0.019 W / m K									
FIRE CLASS			ACCORDING TO TS EN 13501-1 POLYURETHANE B s2 d0									
DENSITY			POLYURETHANE 40 kg/m³ (±2)									
NRWP SSM			LOAD BEARING TABLE							RENOBOARD		
INSULATION THICKNESS	INNER STEEL	1.2 MM PVC LAMINATED STEEL	100	150	200	250	300	350	400	INSULATION THICKNESS	ALUMINIUM INNER SHEET	MEMBRANE THICKNESS
			DISTRIBUTED LOAD (P = KG/M²)									
40	0.50	0.40	249	189	145	116	92	78	59	40		1.20
50	0.50	0.40	303	228	174	139	110	93	69	50		1.20
60	0.60	0.40	369	278	212	166	132	111	82	60		1.20
70	0.60	0.40	482	364	278	218	174	148	108	70		1.20
80	0.70	0.40	625	473	359	282	225	187	137	80		1.20
100	0.70	0.40	780	589	429	345	269	249	165	100		1.20



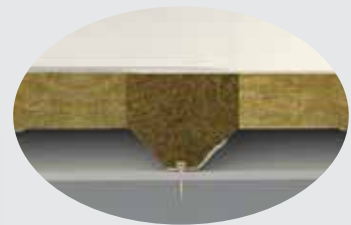
POLYURETHANE (PIR / PUR)



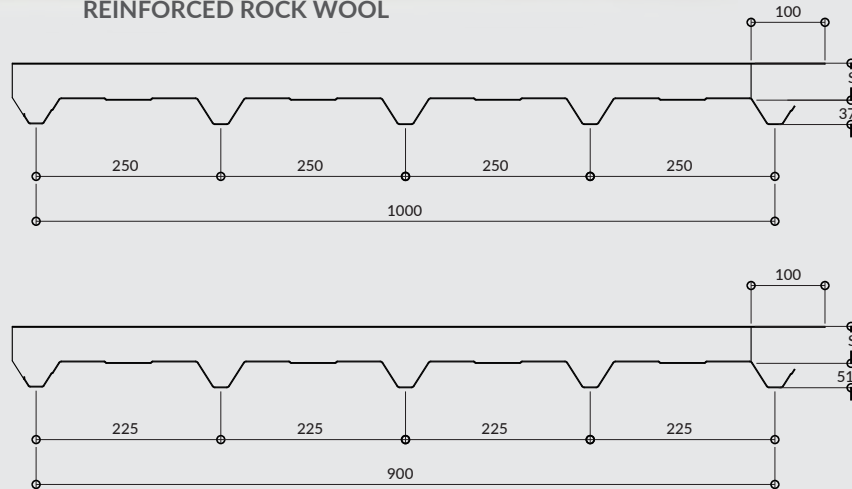
POLYURETHANE (PUR / PIR)



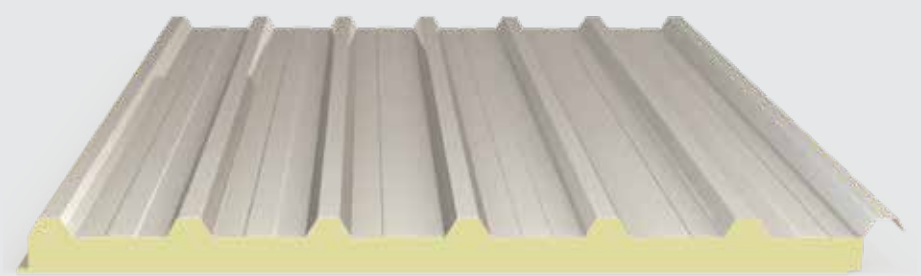
REINFORCED ROCK WOOL



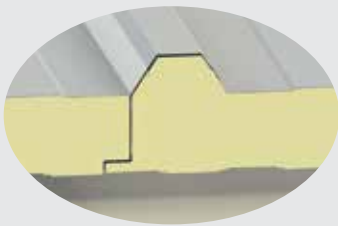
ROCK WOOL



TECHNICAL SPECIFICATIONS			NRP5 SM - NRP5 STM																
INSULATION THICKNESS			40 - 50 - 60 - 70 - 80 - 100 - 120 mm																
MAXIMUM THERMAL CONDUCTIVITY			POLYURETHANE 0.019 W / m K - ROCK WOOL 0.036 W / m K																
FIRE CLASS			ACCORDING TO TS EN 13501-1 POLYURETHANE B s2 d0 - ROCK WOOL A2 s1 d0																
DENSITY			POLYURETHANE 40 kg/m³ (±2) - ROCK WOOL 100 kg/m³ (±10%) - FILLED LIP 130 kg/m³ (±%10)																
NRP5 SM			LOAD BEARING TABLE							NRP5 STM			LIMIT VALUE (L/200)						
INSULATION THICKNESS	MEMBRANE THICKNESS	STEEL THICKNESS	100	150	200	250	300	350	400	INSULATION THICKNESS	MEMBRANE THICKNESS	STEEL THICKNESS	100	150	200	250	300	350	400
			DISTRIBUTED LOAD (P = KG/M²)										DISTRIBUTED LOAD (P = KG/M²)						
40	1.20	0.50	255	198	173	158	149	-	-	40	1.20	0.50	231	177	151	142	131	-	-
50	1.20	0.60	291	229	197	176	166	-	-	50	1.20	0.60	267	207	176	159	145	-	-
60	1.20	0.60	322	254	216	189	172	-	-	60	1.20	0.60	298	232	196	171	156	-	-
70	1.20	0.70	369	278	222	201	181	-	-	70	1.20	0.70	346	256	2013	183	164	-	-
80	1.20	0.80	388	293	248	224	198	-	-	80	1.20	0.80	364	268	229	206	182	-	-
100	1.50	0.90	401	311	271	233	209	-	-	100	1.50	0.90	376	289	252	215	192	-	-
120	1.50	1.00	423	337	296	246	214	-	-	120	1.50	1.00	403	316	276	228	198	-	-



POLYURETHANE (PIR / PUR)



POLYURETHANE (PIR / PUR)



REINFORCED ROCK WOOL



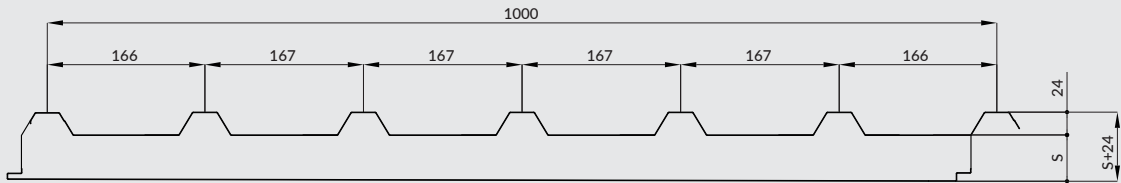
ROCK WOOL



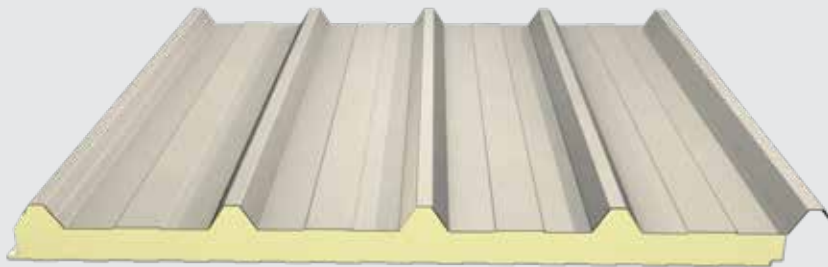
HYBRID ROOF PANEL



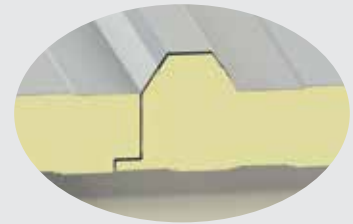
HYBRID



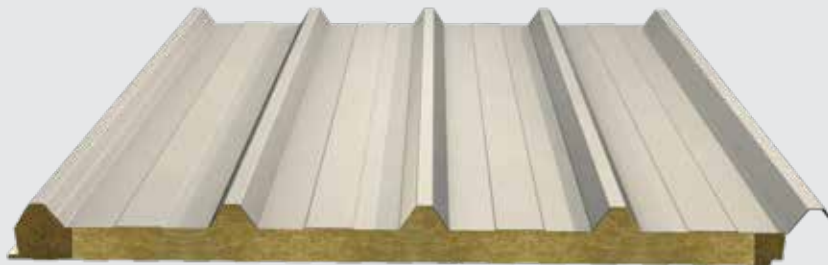
TECHNICAL SPECIFICATIONS			NRP7 SS - NRP7 STS - NRP7 STS-FR																
INSULATION THICKNESS			40 - 50 - 60 - 70 - 80 - 100 - 120 mm																
MAXIMUM THERMAL CONDUCTIVITY			POLYURETHANE 0.019 W / m K - ROCK WOOL 0.036 W / m K																
FIRE CLASS			ACCORDING TO TS EN 13501-1 POLYURETHANE B s2 d0 - ROCK WOOL A2 s1 d0																
DENSITY			POLYURETHANE 40 kg/m³ (±2) - ROCK WOOL 100 kg/m³ (±10%) - FILLED LIP 130 kg/m³ (±%10)																
NRP7 SS			LOAD BEARING TABLE							NRP7 STS - NRP7 STS-FR			LIMIT VALUE (L/200)						
INSULATION THICKNESS	OUTER SHEET	INNER SHEET	100	150	200	250	300	350	400	INSULATION THICKNESS	OUTER SHEET	INNER SHEET	100	150	200	250	300	350	400
			DISTRIBUTED LOAD (P = KG/M²)										DISTRIBUTED LOAD (P = KG/M²)						
40	0.50	0.40	772	463	301	196	128	90	67	40	0.50	0.40	471	261	178	144	92	83	57
		0.50	786	486	316	205	133	100	79			0.50	512	288	201	157	105	86	62
50	0.50	0.40	824	509	331	216	140	109	84	50	0.50	0.40	554	316	223	171	114	91	65
		0.50	843	535	348	227	147	118	91			0.50	596	344	245	183	124	95	68
60	0.50	0.40	877	561	364	236	154	127	97	60	0.50	0.40	638	373	267	196	135	101	70
		0.50	899	575	367	249	157	136	106			0.50	680	402	289	208	145	103	73
70	0.50	0.40	928	590	382	255	165	142	112	70	0.50	0.40	719	431	312	221	156	106	75
		0.50	957	618	386	262	179	155	123			0.50	756	461	334	234	167	109	77
80	0.50	0.40	981	632	400	267	184	164	134	80	0.60	0.50	784	479	350	246	178	111	80
		0.50	1014	648	420	274	201	173	143			0.60	813	496	362	259	187	114	84
100	0.50	0.40	1085	678	441	287	227	201	168	100	0.60	0.50	833	537	394	285	208	121	88
		0.50	1129	713	475	301	245	210	177			0.60	851	578	425	310	229	124	91
120	0.5	0.40	1190	746	485	343	266	239	201	120	0.60	0.50	861	586	431	316	250	133	96
		0.50	1247	783	523	359	287	249	213			0.60	869	602	460	331	270	137	101



POLYURETHANE (PIR / PUR)



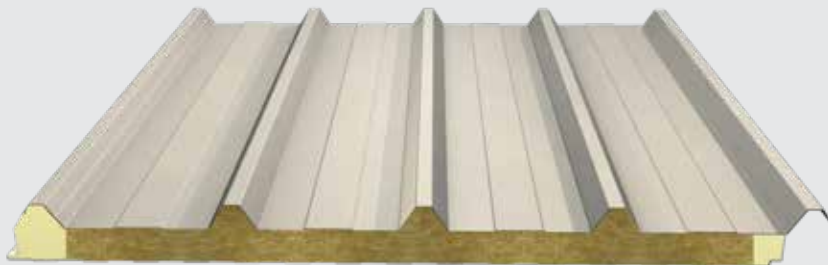
POLYURETHANE (PUR / PIR)



REINFORCED ROCK WOOL



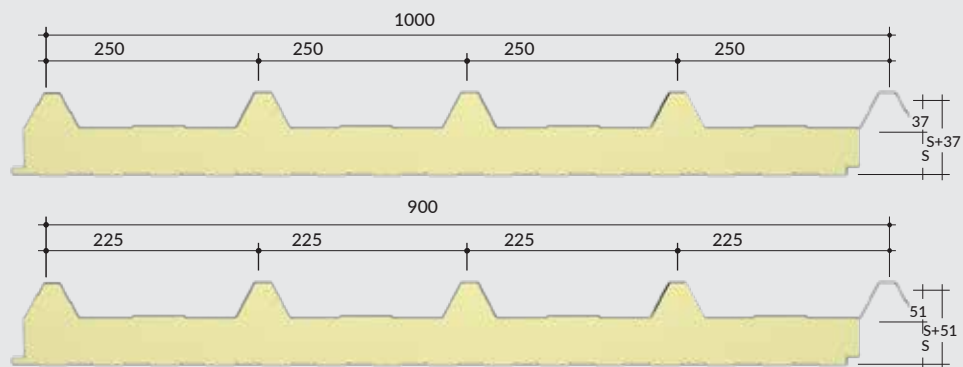
ROCK WOOL



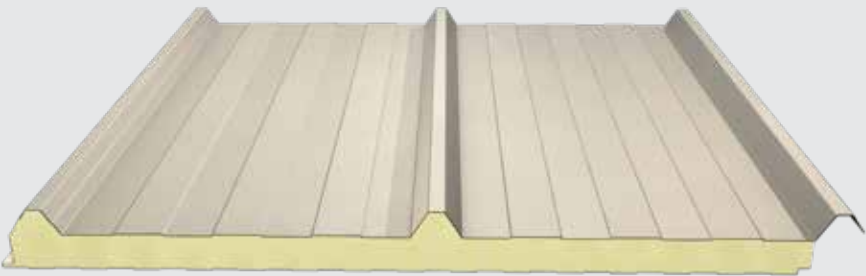
HYBRID ROOF PANEL



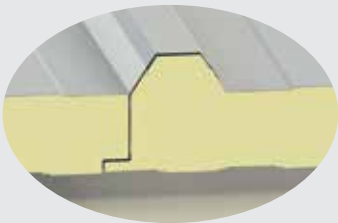
HYBRID



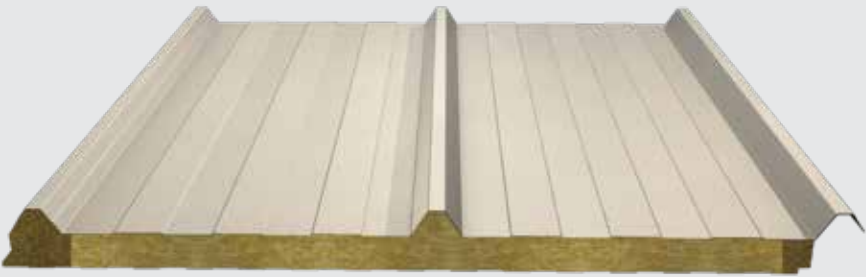
TECHNICAL SPECIFICATIONS			NRP5 SS - NRP5 STS - NRP5 STS-FR																
INSULATION THICKNESS			40 - 50 - 60 - 70 - 80 - 100 - 120 mm																
MAXIMUM THERMAL CONDUCTIVITY			POLYURETHANE 0.019 W / m K - ROCK WOOL 0.036 W / m K																
FIRE CLASS			ACCORDING TO TS EN 13501-1 POLYURETHANE B s2 d0 - ROCK WOOL A2 s1 d0																
DENSITY			POLYURETHANE 40 kg/m³ (±2) - ROCK WOOL 100 kg/m³ (±10%) - FILLED LIP 130 kg/m³ (±%10)																
NRP5 SS			LOAD BEARING TABLE							NRP5 STS - NRP5 STS-FR			LIMIT VALUE (L/200)						
INSULATION THICKNESS	OUTER SHEET	INNER SHEET	100	150	200	250	300	350	400	INSULATION THICKNESS	OUTER SHEET	INNER SHEET	100	150	200	250	300	350	400
			DISTRIBUTED LOAD (P = KG/M²)										DISTRIBUTED LOAD (P = KG/M²)						
40	0.50	0.40	702	421	274	178	116	82	61	40	0.50	0.40	428	237	162	131	84	75	52
		0.50	715	442	287	187	121	91	72			0.50	466	262	182	143	95	78	56
50	0.50	0.40	749	463	301	196	127	98	76	50	0.50	0.40	504	287	202	155	104	83	59
		0.50	766	486	316	206	134	107	83			0.50	542	313	222	166	113	86	62
60	0.50	0.40	797	510	331	215	140	116	88	60	0.50	0.40	580	339	242	178	123	91	63
		0.50	818	523	334	226	143	124	96			0.50	618	365	262	189	132	94	66
70	0.50	0.40	844	536	348	232	150	129	102	70	0.50	0.40	654	392	284	201	142	96	67
		0.50	870	562	351	238	163	141	112			0.50	687	419	306	212	151	99	70
80	0.50	0.40	892	575	364	243	167	149	122	80	0.60	0.50	713	435	318	224	161	100	73
		0.50	922	589	382	249	183	157	130			0.60	739	451	329	235	170	103	76
100	0.50	0.40	986	617	401	261	206	183	153	100	0.60	0.50	757	488	358	259	189	110	80
		0.50	1026	648	432	274	223	191	161			0.60	774	525	386	282	208	113	83
120	0.50	0.40	1082	678	441	312	242	217	183	120	0.60	0.50	783	533	392	287	227	121	87
		0.50	1134	712	475	326	261	226	194			0.60	790	547	418	301	246	124	92



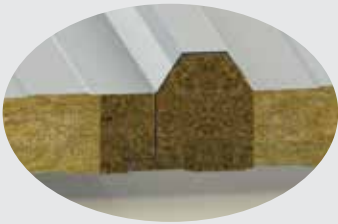
POLYURETHANE (PIR / PUR)



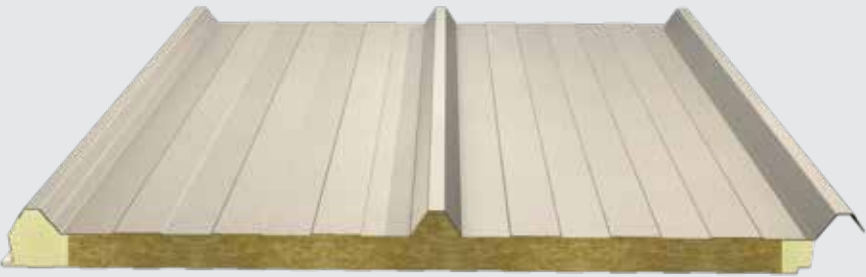
POLYURETHANE (PUR / PIR)



REINFORCED ROCK WOOL



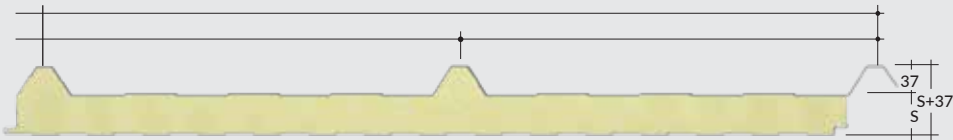
ROCK WOOL



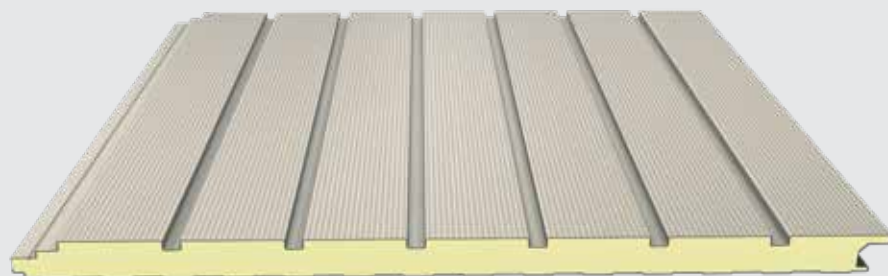
HYBRID ROOF PANEL



HYBRID



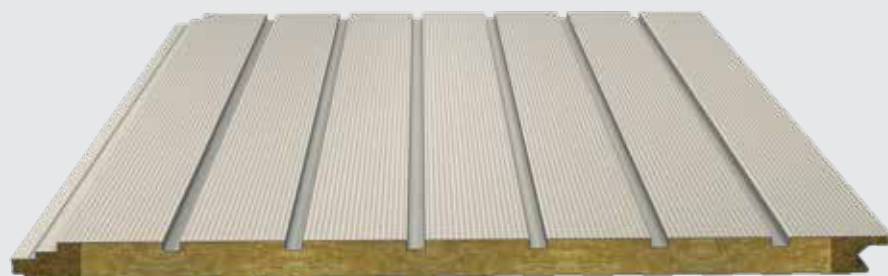
TECHNICAL SPECIFICATIONS			NRP3 SS - NRP3 STS - NRP3 STS-FR																
INSULATION THICKNESS			40 - 50 - 60 - 70 - 80 - 100 - 120 mm																
MAXIMUM THERMAL CONDUCTIVITY			POLYURETHANE 0.019 W / m K - ROCK WOOL 0.036 W / m K																
FIRE CLASS			ACCORDING TO TS EN 13501-1 POLYURETHANE B s2 d0 - ROCK WOOL A2 s1 d0																
DENSITY			POLYURETHANE 40 kg/m³ (±2) - ROCK WOOL 100 kg/m³ (±10%) - FILLED LIP 130 kg/m³ (±%10)																
NRP3 SS			LOAD BEARING TABLE							NRP3 STS - NRP3 STS-FR			LIMIT VALUE (L/200)						
INSULATION THICKNESS	OUTER SHEET	INNER SHEET	100	150	200	250	300	350	400	INSULATION THICKNESS	OUTER SHEET	INNER SHEET	100	150	200	250	300	350	400
			DISTRIBUTED LOAD (P = KG/M²)										DISTRIBUTED LOAD (P = KG/M²)						
40	0.50	0.40	413	265	182	132	102	76	57	40	0.50	0.40	290	169	122	94	70	59	-
		0.50	432	273	193	143	111	83	61			0.50	308	186	134	107	79	63	-
50	0.50	0.40	446	279	204	155	120	89	64	50	0.50	0.40	332	202	142	119	86	67	-
		0.50	462	286	217	166	129	97	69			0.50	348	217	156	124	94	71	-
60	0.50	0.40	477	294	226	177	138	102	71	60	0.50	0.40	374	231	164	141	102	76	52
		0.50	489	300	241	189	148	110	76			0.50	389	248	178	141	108	79	57
70	0.50	0.40	508	312	249	199	156	115	78	70	0.50	0.40	412	262	186	160	119	83	63
		0.50	523	327	266	212	167	124	83			0.50	430	279	200	158	123	89	65
80	0.50	0.40	539	423	272	223	174	127	85	80	0.60	0.50	453	294	208	177	135	94	67
		0.50	554	438	289	236	186	137	91			0.60	470	310	222	175	137	99	70
100	0.50	0.40	596	452	317	269	210	153	99	100	0.60	0.50	534	358	252	206	166	103	73
		0.50	615	469	338	281	223	164	105			0.60	550	372	267	210	166	107	77
120	0.50	0.40	662	482	362	314	246	178	113	120	0.60	0.50	613	419	296	230	185	113	81
		0.50	678	499	387	328	261	190	120			0.60	632	435	312	245	196	118	87



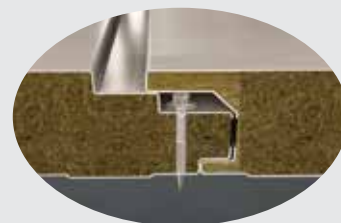
POLYURETHANE (PIR / PUR)



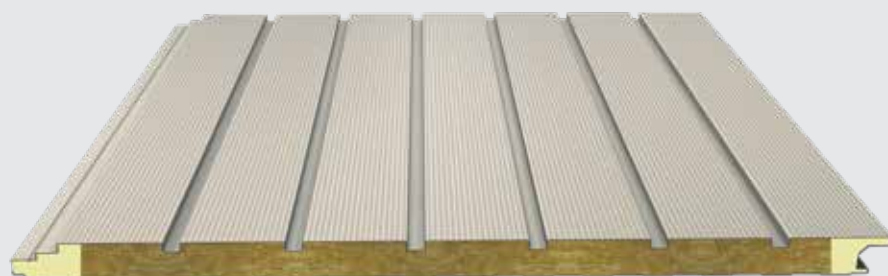
POLYURETHANE (PUR / PIR)



REINFORCED ROCK WOOL



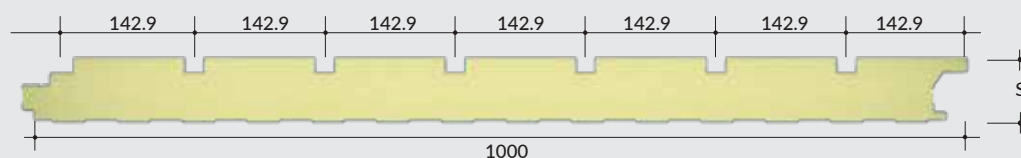
ROCK WOOL



HYBRID PRISMA WALL PANEL



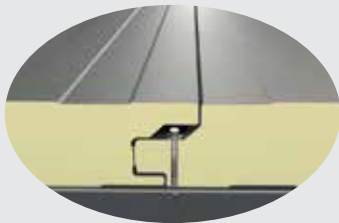
HYBRID



TECHNICAL SPECIFICATIONS			NWP7 SS - NWP7 STS - NWP7 STS-FR																
INSULATION THICKNESS			40 - 50 - 60 - 70 - 80 - 100 - 120 mm																
MAXIMUM THERMAL CONDUCTIVITY			POLYURETHANE 0.019 W / m K - ROCK WOOL 0.036 W / m K																
FIRE CLASS			ACCORDING TO TS EN 13501-1 POLYURETHANE B s2 d0 - ROCK WOOL A2 s1 d0																
DENSITY			POLYURETHANE 40 kg/m³ (±2) - ROCK WOOL 100 kg/m³ (±10%) - FILLED LIP 130 kg/m³ (±10%)																
NWP7 SS			LOAD BEARING TABLE							NWP7 STS - NWP7 STS-FR			LIMIT VALUE (L/200)						
INSULATION THICKNESS	OUTER SHEET	INNER SHEET	100	150	200	250	300	350	400	INSULATION THICKNESS	OUTER SHEET	INNER SHEET	100	150	200	250	300	350	400
			DISTRIBUTED LOAD (P = KG/M²)										DISTRIBUTED LOAD (P = KG/M²)						
40	0.50	0.40	299	227	174	139	110	94	71	40	0.50	0.40	233	182	148	126	103	78	62
		0.50	338	246	190	152	125	104	78			0.50	292	228	190	152	126	94	73
50	0.50	0.40	391	298	229	179	143	125	90	50	0.50	0.40	350	274	218	178	143	107	83
		0.50	409	326	253	197	160	138	98			0.50	416	328	264	209	169	125	94
60	0.50	0.40	486	367	284	221	174	156	109	60	0.50	0.40	488	367	287	230	182	137	103
		0.50	518	406	311	244	194	172	120			0.50	542	425	338	268	121	158	115
70	0.50	0.40	580	439	340	263	206	187	128	70	0.50	0.40	598	458	356	283	222	167	122
		0.50	626	485	374	289	229	204	140			0.50	667	526	413	325	254	191	137
80	0.50	0.40	674	510	395	303	239	218	148	80	0.60	0.50	710	551	425	337	262	197	143
		0.50	734	563	430	334	263	238	161			0.60	793	624	487	382	298	223	158
100	0.50	0.40	863	650	506	386	304	280	187	100	0.60	0.50	955	737	566	440	341	258	184
		0.50	947	718	553	424	335	305	204			0.60	1046	824	635	497	383	289	202
120	0.50	0.40	1054	798	616	470	368	342	226	120	0.60	0.50	1188	923	707	547	420	317	223
		0.50	1169	878	674	516	402	372	246			0.60	1235	1028	787	611	468	354	246



POLYURETHANE (PIR / PUR)



POLYURETHANE (PUR / PIR)



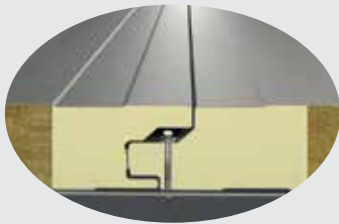
REINFORCED ROCK WOOL



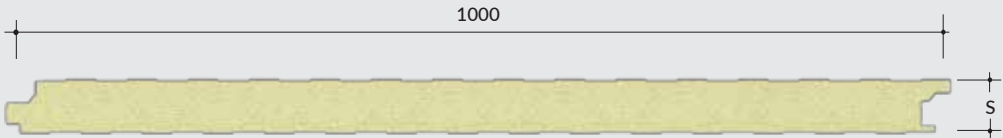
ROCK WOOL



HYBRID WALL PANEL



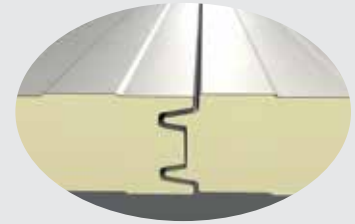
HYBRID



TECHNICAL SPECIFICATIONS			NWP0 SS - NWP0 STS - NWP0 STS-FR																
INSULATION THICKNESS			40 - 50 - 60 - 70 - 80 - 100 - 120 - 150 mm																
MAXIMUM THERMAL CONDUCTIVITY			POLYURETHANE 0.019 W / m K - ROCK WOOL 0.036 W / m K																
FIRE CLASS			ACCORDING TO TS EN 13501-1 POLYURETHANE B s2 d0 - ROCK WOOL A2 s1 d0																
DENSITY			POLYURETHANE 40 kg/m³ (±2) - ROCK WOOL 100 kg/m³ (±10%) - FILLED LIP 130 kg/m³ (±%10)																
NWP0 SS			LOAD BEARING TABLE							NWP0 STS - NWP0 STS-FR			LIMIT VALUE (L/200)						
INSULATION THICKNESS	OUTER SHEET	INNER SHEET	100	150	200	250	300	350	400	INSULATION THICKNESS	OUTER SHEET	INNER SHEET	100	150	200	250	300	350	400
			DISTRIBUTED LOAD (P = KG/M²)										DISTRIBUTED LOAD (P = KG/M²)						
40	0.50	0.40	249	189	145	116	92	78	59	40	0.50	0.40	194	152	123	105	86	65	52
		0.50	282	205	158	127	104	87	65			0.50	243	190	158	127	105	78	61
50	0.50	0.40	326	248	191	149	119	104	75	50	0.50	0.40	292	228	182	148	119	89	69
		0.50	341	272	211	164	133	115	82			0.50	347	273	220	174	141	104	78
60	0.50	0.40	405	306	237	184	145	130	91	60	0.60	0.50	407	306	239	192	152	114	86
		0.50	432	338	259	203	162	143	100			0.60	452	354	282	223	177	132	96
70	0.50	0.40	483	366	283	219	172	156	107	70	0.60	0.50	498	382	297	236	185	139	102
		0.50	522	404	312	241	191	170	117			0.60	558	438	344	271	212	159	114
80	0.50	0.40	562	425	329	253	199	182	123	80	0.60	0.50	592	459	354	281	218	164	119
		0.50	612	469	358	278	219	198	134			0.60	661	520	406	318	248	186	132
100	0.50	0.40	719	542	422	322	253	233	156	100	0.60	0.50	796	614	472	367	284	215	153
		0.50	789	598	461	353	278	254	170			0.60	872	687	529	414	319	241	168
120	0.50	0.40	878	665	513	392	307	285	188	120	0.60	0.50	990	769	589	456	350	264	186
		0.50	974	732	562	430	335	310	205			0.60	1083	857	656	509	390	295	203



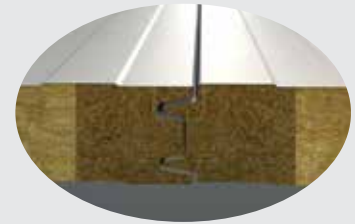
POLYURETHANE (PIR / PUR)



POLYURETHANE (PUR / PIR)



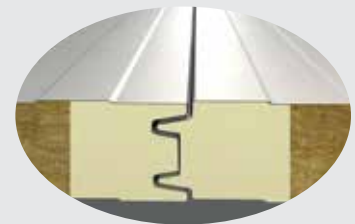
REINFORCED ROCK WOOL



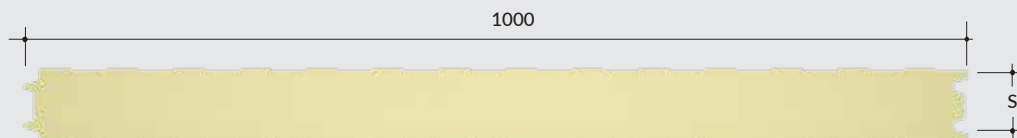
ROCK WOOL



HYBRID WALL PANEL



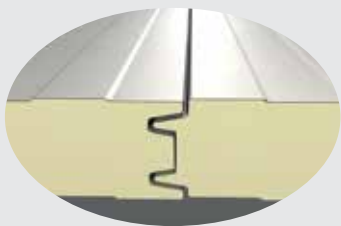
HYBRID



TECHNICAL SPECIFICATIONS			NWP0 SSDV - NWP0 STSDV - NWP0 STSDV-FR																
INSULATION THICKNESS			40 - 50 - 60 - 70 - 80 - 100 - 120 - 150 mm																
MAXIMUM THERMAL CONDUCTIVITY			POLYURETHANE 0.019 W / m K - ROCK WOOL 0.036 W / m K																
FIRE CLASS			ACCORDING TO TS EN 13501-1 POLYURETHANE B s2 d0 - ROCK WOOL A2 s1 d0																
DENSITY			POLYURETHANE 40 kg/m³ (±2) - ROCK WOOL 100 kg/m³ (±10%) - FILLED LIP 130 kg/m³ (±10)																
NWP0 SSDV			LOAD BEARING TABLE							NWP0 STSDV - FR			LIMIT VALUE (L/200)						
INSULATION THICKNESS	OUTER SHEET	INNER SHEET	100	150	200	250	300	350	400	INSULATION THICKNESS	OUTER SHEET	INNER SHEET	100	150	200	250	300	350	400
			DISTRIBUTED LOAD (P = KG/M²)										DISTRIBUTED LOAD (P = KG/M²)						
40	0.50	0.40	212	161	123	98	78	66	50	40	0.50	0.40	165	129	105	89	73	55	-
		0.50	240	174	134	108	89	74	55			0.50	207	162	134	108	89	66	52
50	0.50	0.40	277	211	162	127	101	88	64	50	0.50	0.40	248	194	155	126	101	46	59
		0.50	290	231	179	139	113	98	70			0.50	295	232	187	148	120	88	66
60	0.50	0.40	344	260	202	156	123	110	77	60	0.60	0.50	346	260	203	163	129	97	73
		0.50	367	287	220	173	138	121	85			0.60	384	301	240	190	150	112	82
70	0.50	0.40	410	311	241	186	146	132	61	70	0.60	0.50	423	325	253	201	157	118	87
		0.50	444	343	265	205	162	144	99			0.60	474	372	292	230	180	135	97
80	0.50	0.40	478	361	280	215	169	155	105	80	0.60	0.50	503	390	302	239	185	139	101
		0.50	520	399	304	236	186	168	114			0.60	562	442	345	270	211	158	112
100	0.50	0.40	611	461	359	273	215	198	133	100	0.60	0.50	677	522	401	312	241	183	130
		0.50	671	508	392	300	236	216	145			0.60	741	584	450	352	271	205	143
120	0.50	0.40	746	565	436	334	261	242	160	120	0.60	0.50	842	654	502	388	298	224	158
		0.50	828	622	478	367	285	264	174			0.60	921	729	558	433	332	251	173



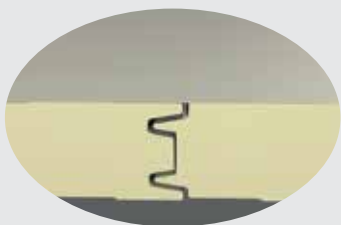
COLD ROOM PANEL



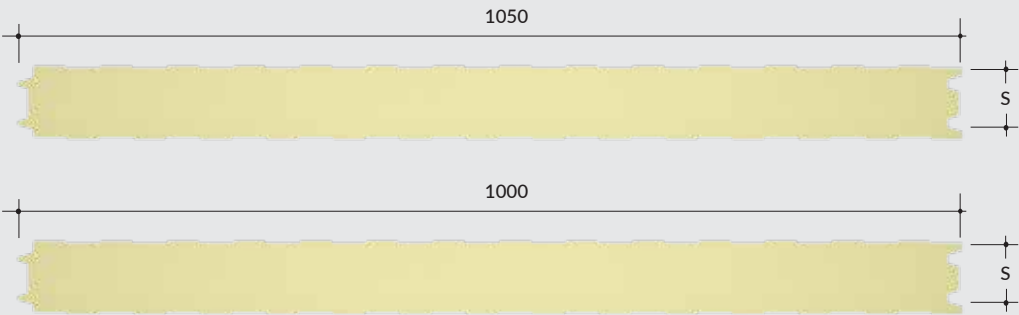
JOINT DETAIL



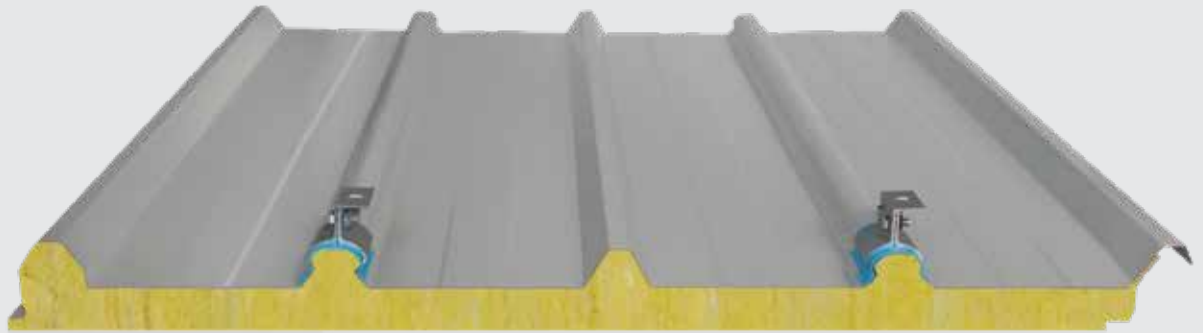
LAMINATED STEEL COLD ROOM PANEL



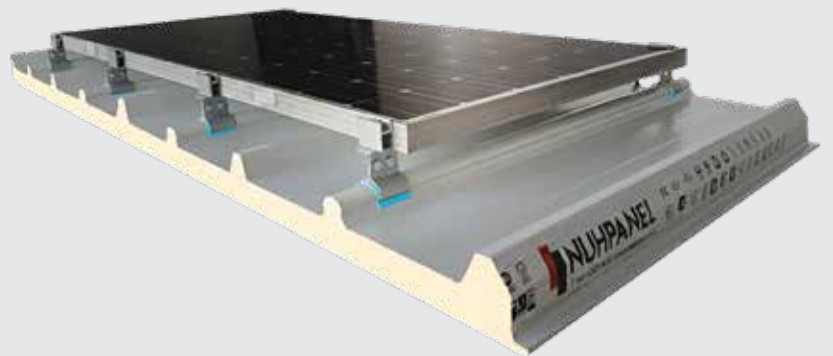
JOINT DETAIL



TECHNICAL SPECIFICATIONS			CCP0 SS - CCP0 SSM																
INSULATION THICKNESS			40 - 50 - 60 - 70 - 80 - 100 - 120 - 150 - 200 mm																
MAXIMUM THERMAL CONDUCTIVITY			POLYURETHANE 0.019 W / m K - ROCK WOOL 0.036 W / m K																
FIRE CLASS			ACCORDING TO TS EN 13501-1 POLYURETHANE B s2 d0 - ROCK WOOL A2 s1 d0																
DENSITY			POLYURETHANE 40 kg/m³ (±2) - ROCK WOOL 100 kg/m³ (±10%) - FILLED LIP 130 kg/m³ (±%10)																
CCP0 SS			LOAD BEARING TABLE							CCP0 SSM			LIMIT VALUE (L/200)						
INSULATION THICKNESS	OUTER SHEET	INNER SHEET	100	150	200	250	300	350	400	INSULATION THICKNESS	OUTER SHEET	1.2 mm PVC LAMINATED STEEL	100	150	200	250	300	350	400
			DISTRIBUTED LOAD (P = KG/M²)										DISTRIBUTED LOAD (P = KG/M²)						
40	0.50	0.40	212	161	123	98	78	66	50	40	0.50	0.40	224	170	131	105	83	70	53
		0.50	240	174	134	108	89	74	55				272	205	157	125	99	84	62
50	0.50	0.40	277	211	162	127	101	88	64	50	0.50	0.40	272	205	157	125	99	84	62
		0.50	290	231	179	139	113	98	70				332	250	191	149	119	100	74
60	0.50	0.40	344	260	202	156	123	110	77	60	0.60	0.40	332	250	191	149	119	100	74
		0.50	367	287	220	173	138	121	85				433	328	250	196	157	133	97
70	0.50	0.40	410	311	241	186	146	132	61	70	0.60	0.40	433	328	250	196	157	133	97
		0.50	444	343	265	205	162	144	99				563	426	323	254	203	168	123
80	0.50	0.40	478	361	280	215	169	155	105	80	0.70	0.40	563	426	323	254	203	168	123
		0.50	520	399	304	236	186	168	114				702	530	386	311	242	224	149
100	0.50	0.40	611	461	359	273	215	198	133	100	0.70	0.40	702	530	386	311	242	224	149
		0.50	671	508	392	300	236	216	145				780	589	429	345	269	249	165
120	0.50	0.40	746	565	436	334	261	242	160	120	0.70	0.40	780	589	429	345	269	249	165
		0.50	828	622	478	367	285	264	174										



ROCK WOOL



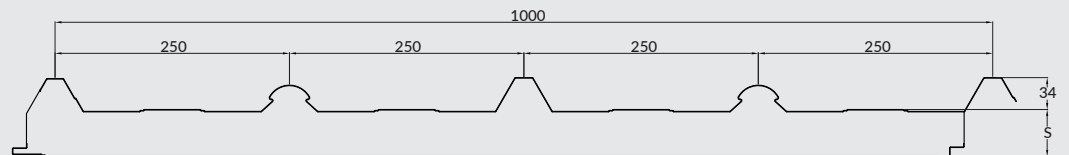
POLYURETHANE (PUR / PIR)



Solar Panel
Mounting Kit

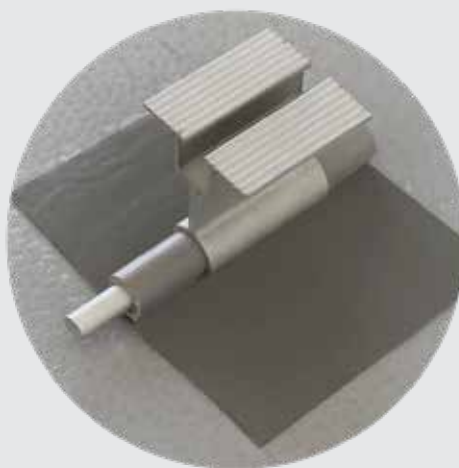
Mounting Kit; PVC Gasket

- ✓ Prevents Corrosion
- ✓ Provides Full Stability
- ✓ No Extra Profile Required!



ROCK WOOL PIR / PUR

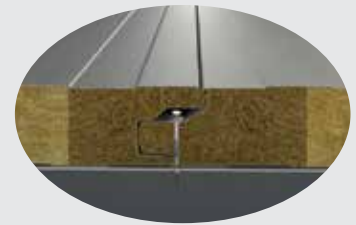
NGRPS SS			LOAD BEARING TABLE						
INSULATION THICKNESS	OUTER SHEET	INNER SHEET	100	150	200	250	300	350	400
			DISTRIBUTED LOAD (P = KG/M ²)						
40	0.50	0.40	632	379	247	160	104	74	55
		0.50	643	398	258	168	109	82	65
50	0.50	0.40	674	417	271	176	114	88	69
		0.50	689	419	274	179	117	96	45
60	0.50	0.40	717	459	298	194	126	104	79
		0.50	736	471	301	203	129	112	86
70	0.50	0.40	759	482	313	209	135	116	92
		0.50	783	494	316	214	147	127	101
80	0.50	0.40	803	505	328	219	150	134	110
		0.50	829	530	335	224	165	141	117
100	0.50	0.40	887	555	361	235	185	165	138
		0.50	923	583	389	247	201	172	145
120	0.50	0.40	974	610	397	281	218	195	165
		0.50	1021	640	428	293	235	203	175



**With the Solar Mounting Kit You Do Not Pierce Your Roof,
No Profile Required!**



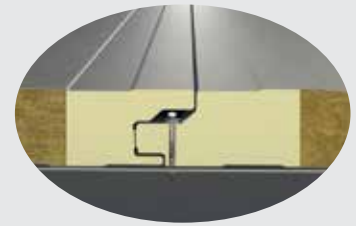
REINFORCED ROCK WOOL



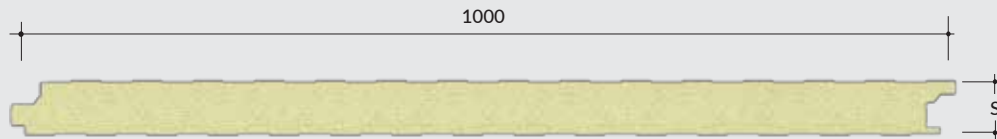
ROCK WOOL



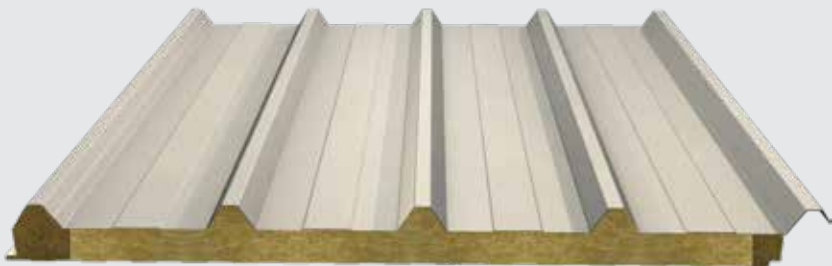
HYBRID ACOUSTIC WALL PANEL



HYBRID



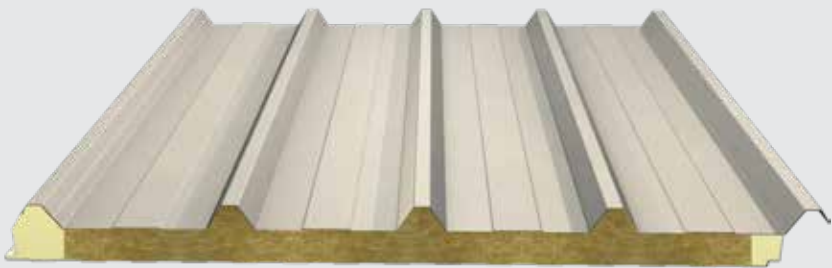
TECHNICAL SPECIFICATIONS			NWP0 SS - NWP0 STS - NWP0 STS-FR																
INSULATION THICKNESS			40 - 50 - 60 - 70 - 80 - 100 - 120 - 150 mm																
MAXIMUM THERMAL CONDUCTIVITY			POLYURETHANE 0.019 W / m K - ROCK WOOL 0.036 W / m K																
FIRE CLASS			ACCORDING TO TS EN 13501-1 POLYURETHANE B s2 d0 - ROCK WOOL A2 s1 d0																
DENSITY			POLYURETHANE 40 kg/m³ (±2) - ROCK WOOL 100 kg/m³ (±10%) - FILLED LIP 130 kg/m³ (±%10)																
NWP0 STS ACOUSTIC			LOAD BEARING TABLE							NWP0 STS-FR ACOUSTIC			LIMIT VALUE (L/200)						
INSULATION THICKNESS	OUTER SHEET	INNER SHEET	100	150	200	250	300	350	400	INSULATION THICKNESS	OUTER SHEET	INNER SHEET	100	150	200	250	300	350	400
			DISTRIBUTED LOAD (P = KG/M²)										DISTRIBUTED LOAD (P = KG/M²)						
40	0.60	0.70	249	189	145	116	92	78	54	40	0.60	0.70	194	152	123	105	86	65	52
50	0.60	0.70	286	222	172	134	108	83	60	50	0.60	0.70	243	190	158	127	105	78	61
60	0.60	0.70	344	266	212	161	141	108	81	60	0.60	0.70	292	228	182	148	119	89	69
70	0.60	0.70	405	306	237	184	145	130	91	70	0.60	0.70	347	273	220	174	141	104	78
80	0.60	0.70	462	357	275	205	160	128	85	80	0.60	0.70	432	338	259	203	162	143	100
100	0.60	0.70	576	440	340	260	193	147	110	100	0.60	0.70	562	425	329	253	199	182	123
120	0.60	0.70	775	598	461	356	276	208	158	120	0.60	0.70	719	542	422	322	253	233	156
150	0.60	0.70	995	775	595	462	356	270	192	150	0.60	0.70	974	732	562	430	335	310	205



REINFORCED ROCK WOOL



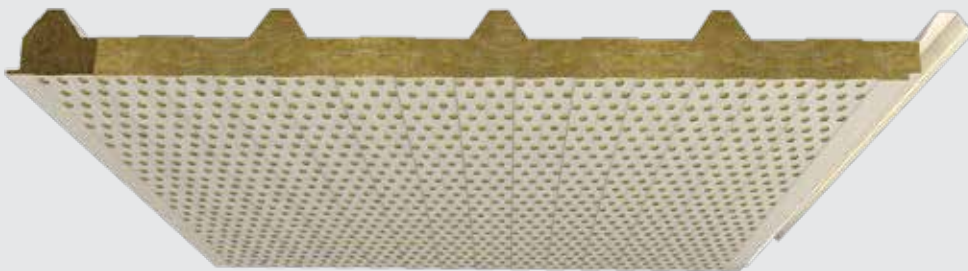
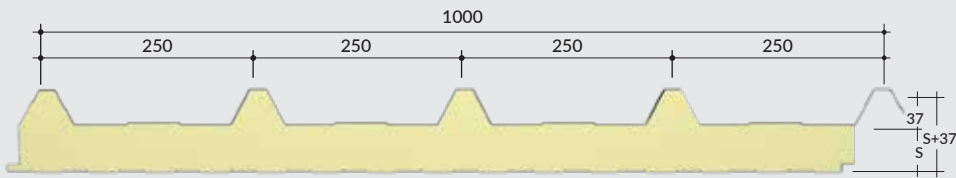
ROCK WOOL



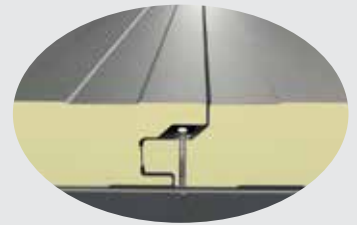
HYBRID ACOUSTIC ROOF PANEL



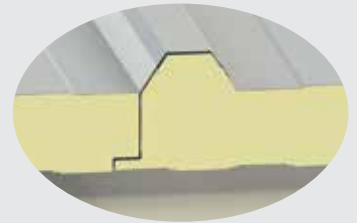
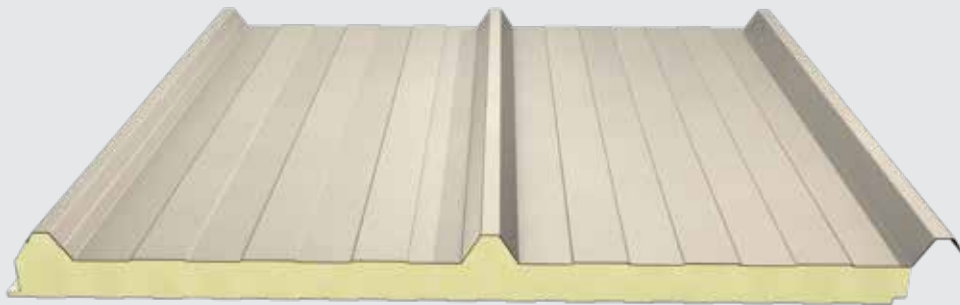
PUR / PIR
LIP



TECHNICAL SPECIFICATIONS			NRP5 STS ACOUSTIC - NRP5 STS-FR ACOUSTIC																
INSULATION THICKNESS			40 - 50 - 60 - 70 - 80 - 100 - 120 - 150 mm																
MAXIMUM THERMAL CONDUCTIVITY			POLYURETHANE 0.019 W / m K - ROCK WOOL 0.036 W / m K																
FIRE CLASS			ACCORDING TO TS EN 13501-1 POLYURETHANE B s2 d0 - ROCK WOOL A2 s1 d0																
DENSITY			POLYURETHANE 40 kg/m³ (±2) - ROCK WOOL 100 kg/m³ (±10%) - FILLED LIP 130 kg/m³ (±10)																
NRP5 STS ACOUSTIC			LOAD BEARING TABLE							NRP5 STS-FR ACOUSTIC			LIMIT VALUE (L/200)						
INSULATION THICKNESS	OUTER SHEET	INNER SHEET	100	150	200	250	300	350	400	INSULATION THICKNESS	OUTER SHEET	INNER SHEET	100	150	200	250	300	350	400
			DISTRIBUTED LOAD (P = KG/M²)										DISTRIBUTED LOAD (P = KG/M²)						
40	0.60	0.70	428	318	274	248	171	122	81	40	0.60	0.70	392	237	162	131	84	75	52
50	0.60	0.70	570	434	379	261	180	128	85	50	0.60	0.70	504	313	222	166	113	86	62
60	0.60	0.70	769	550	398	274	189	134	89	60	0.60	0.70	715	442	287	187	121	91	72
70	0.60	0.70	799	561	408	281	194	138	92	70	0.60	0.70	749	463	301	196	127	98	76
80	0.60	0.70	828	572	418	288	198	141	94	80	0.60	0.70	766	466	304	199	130	107	83
100	0.60	0.70	865	592	439	302	208	148	98	100	0.60	0.70	797	510	331	215	140	116	88
120	0.60	0.70	908	599	461	317	219	156	103	120	0.60	0.70	844	536	348	226	150	129	102
150	6.00	0.70	986	617	475	329	226	163	122	150	6.00	0.70	922	589	367	249	183	157	116

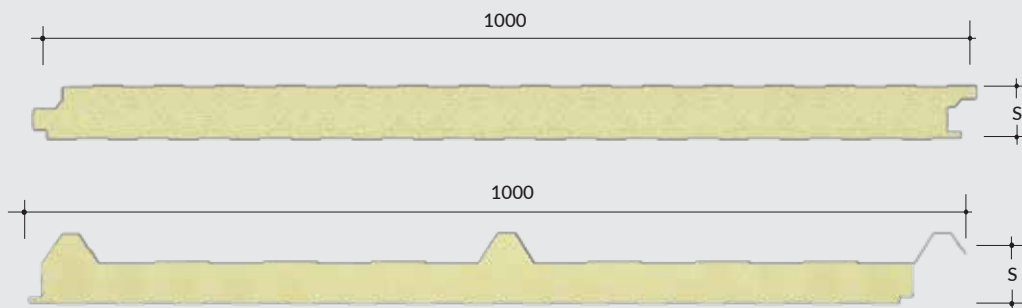


POLYURETHANE (PUR / PIR)

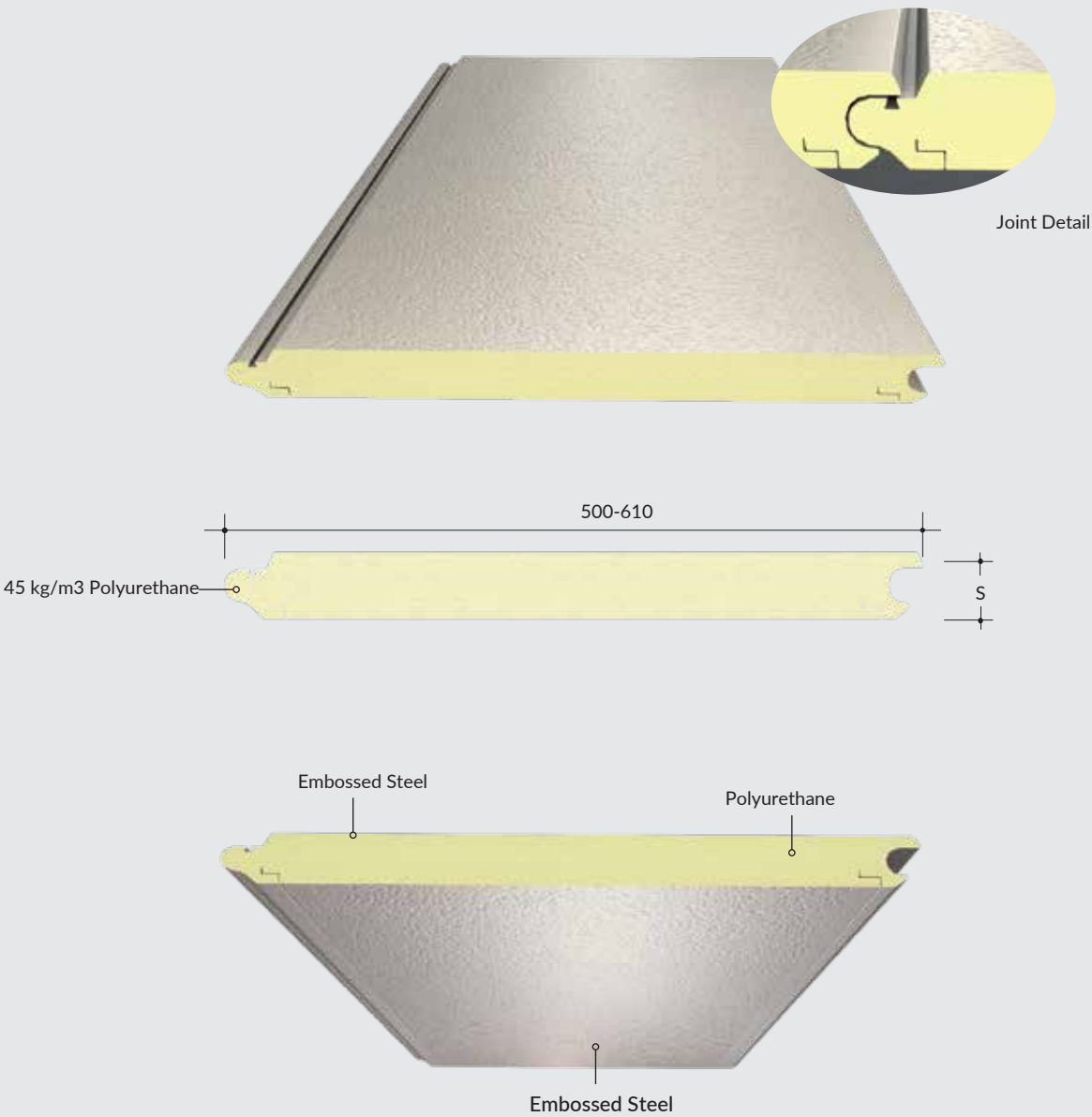


POLYURETHANE (PUR / PIR)

POLYURETHANE ECO PANEL

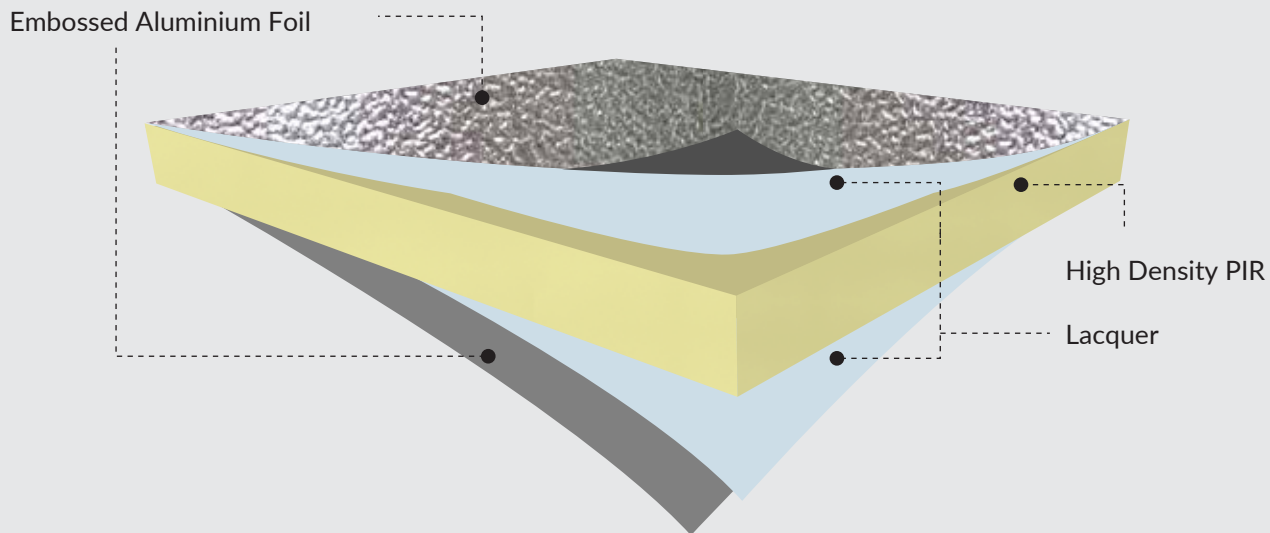


TECHNICAL SPECIFICATIONS	NWP0EE
Effective Width	1000 mm
Minimum / Maximum Length	2.5 m - 15.5 m
Paint Type	Polyester, PVDF, Plastisol
Insulation Thickness	40-50 mm
Insulation Type	Polyurethane - Polystyrene (EPS)
Maximum Thermal Conductivity	0.019 W/m K



TECHNICAL SPECIFICATIONS	FLX0SS42 - 500/610
Effective Width	500 - 610 mm
Minimum / Maximum Length	2.5 m - 15.5 m
Paint Type	Polyamide, Polyester
Insulation Thickness	42 mm
Insulation Type	Polyurethane
Maximum Thermal Conductivity	0.019 W/m K
Fire Class	B-s2-d0 according to TS EN 14509 (TS EN 13501-1)
Density	45 kg/m3 (PUR)

Panel Structure



NKS SELF-INSULATED AIR DUCT SYSTEM

Compared with conventional ventilation duct systems it delivers substantial energy savings and is technologically superior. It is corrosion resistant, hygienic and environmentally friendly. It is highly practical and economical, especially in on-site applications.

Features That Make the Difference

- | | |
|-------------------------------|--------------------------|
| 1 - Thermal Insulation | 6 - Sound Insulation |
| 2 - Energy Saving | 7 - UV Resistance |
| 3 - No More Air and Heat Loss | 8 - Decorative |
| 4 - Corrosion Resistant | 9 - Easy Installation, |
| 5 - Hygienic and Eco-Friendly | 10 - Logistics Advantage |

TIMBER	280mm	$\lambda = 0,128 \text{ W/}^{\circ}\text{K.h}$
GLASS WOOL	130mm	$\lambda = 0,060 \text{ W/}^{\circ}\text{K.h}$
ROCK WOOL	100mm	$\lambda = 0,036 \text{ W/}^{\circ}\text{K.h}$
POLYSTYRENE	80mm	$\lambda = 0,036 \text{ W/}^{\circ}\text{K.h}$
POLYURETHANE	50mm	$\lambda = 0,019 \text{ W/}^{\circ}\text{K.h}$
PIR	20mm	$\lambda = 0,022 \text{ W/}^{\circ}\text{K.h}$
NKS	20mm	$\lambda = 0,0168 \text{ W/}^{\circ}\text{K.h}$



Heat and Water Insulation



Hygienic



Energy Efficiency



Lightweight



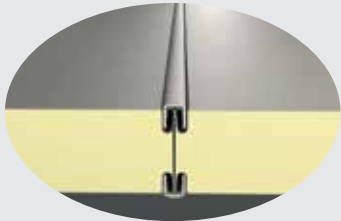
Decorative



Easy Installation



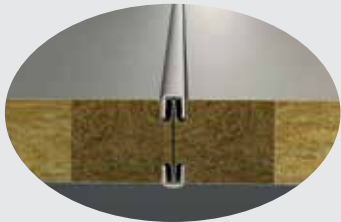
POLYURETHANE (PIR / PUR)



POLYURETHANE (PUR / PIR)



REINFORCED ROCK WOOL



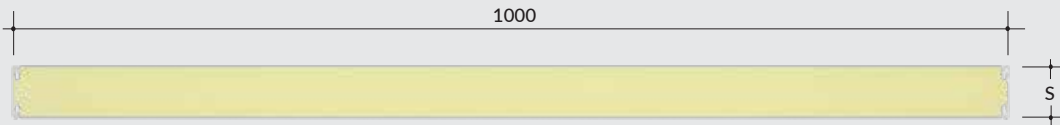
ROCK WOOL



HYBRID

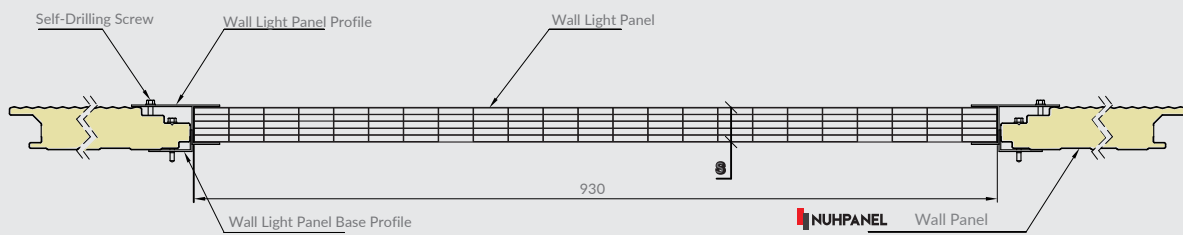
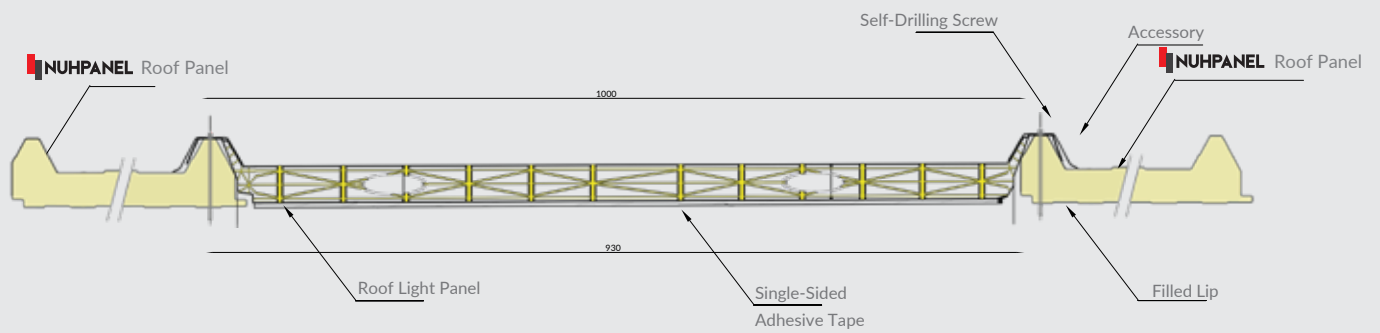
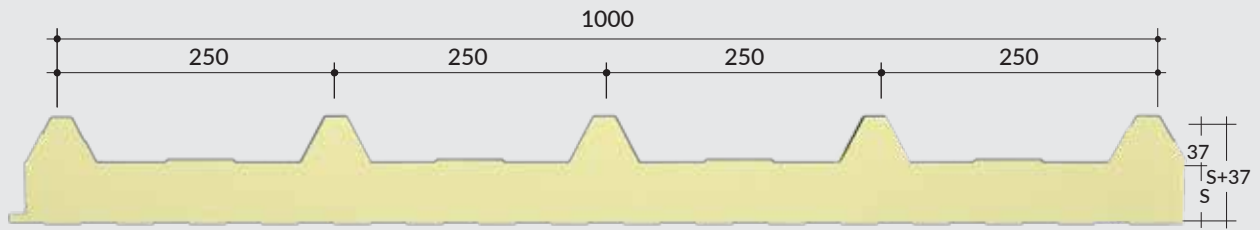


HYBRID

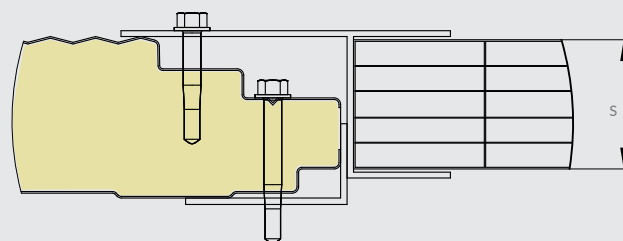


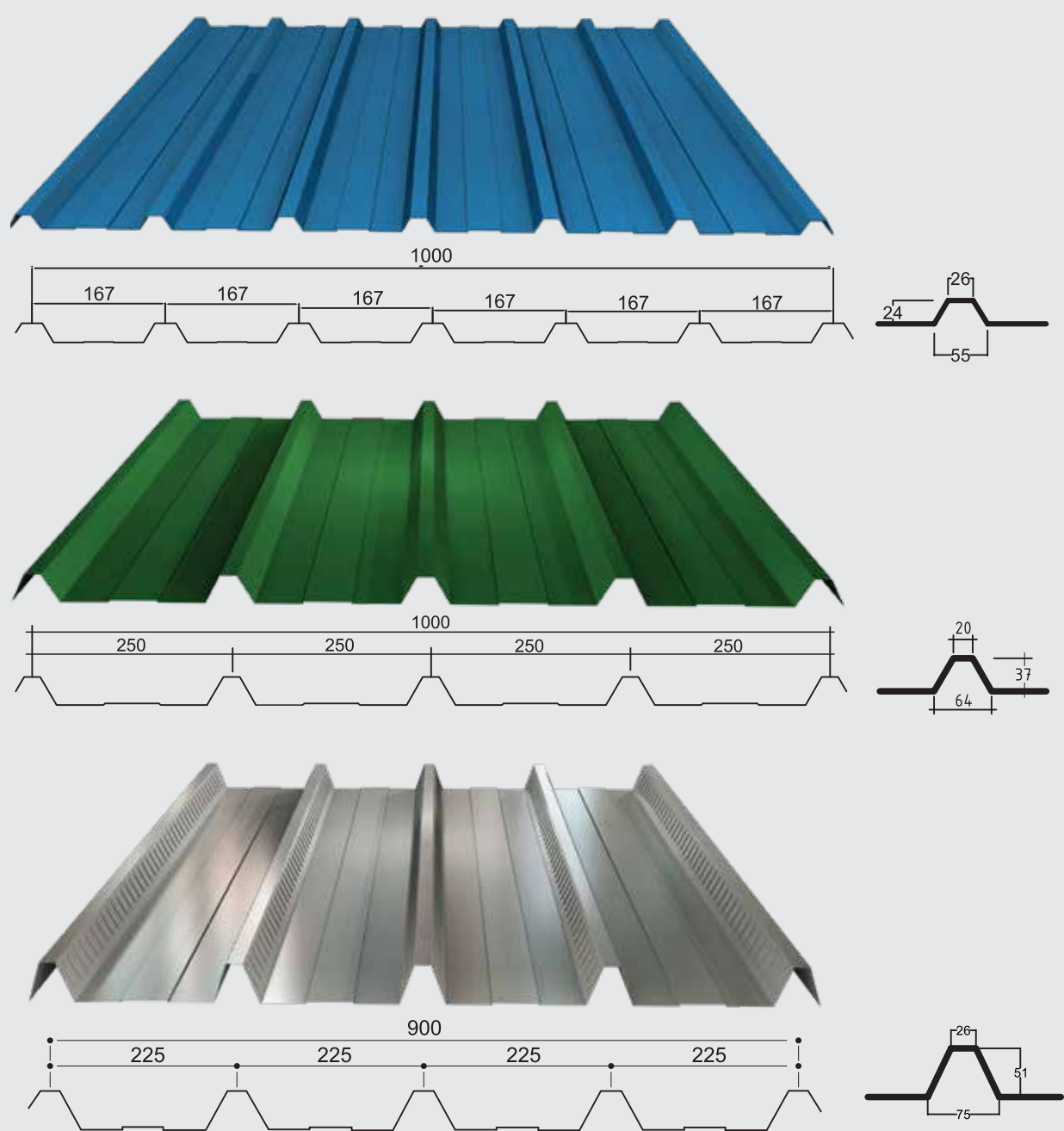
TECHNICAL SPECIFICATIONS	NSPP - NSPT - NSPT-FR
Effective Width	1000 mm
Minimum / Maximum Length	2.5 m - 15.5 m
Paint Type	Polyester, PVDF, Plastisol
Insulation Thickness	40-50-60-70-80-100 mm
Insulation Type	Polyurethane - Polyisocyanurate - Rock Wool - Hybrid
Maximum Thermal Conductivity	0.019 W/m K - 0.036 W/m K
Fire Class	B-s2-d0 - A2-s1-d0 according to TS EN 14509 (TS EN 13501-1)
Density	38-40 kg/m3 PUR-PIR - 100 kg/m3 Rock Wool (Filled lip: 130 kg/m3)

*Optional bonding available. (Sheet thickness min. 0.60 mm and above)



DETAIL

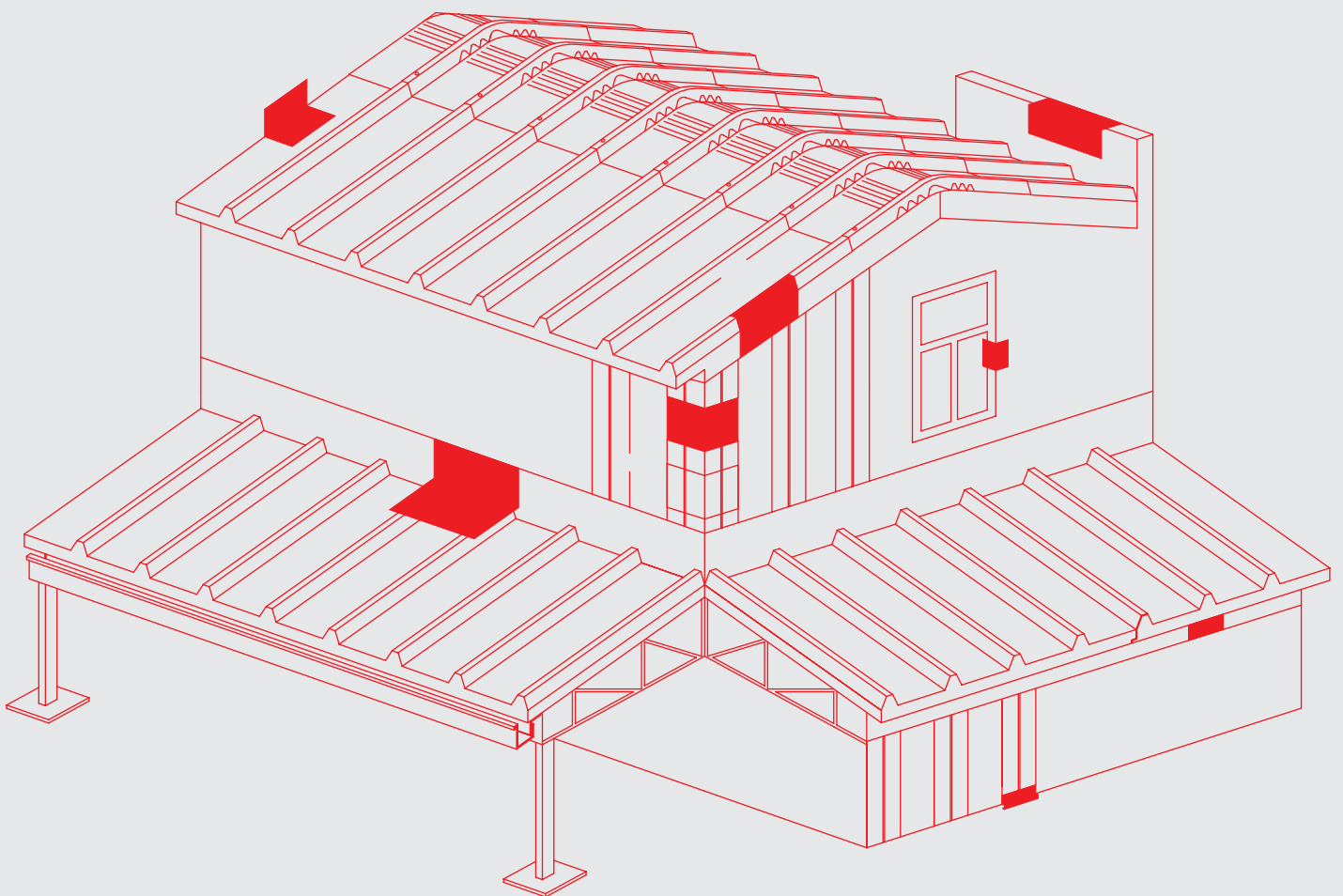




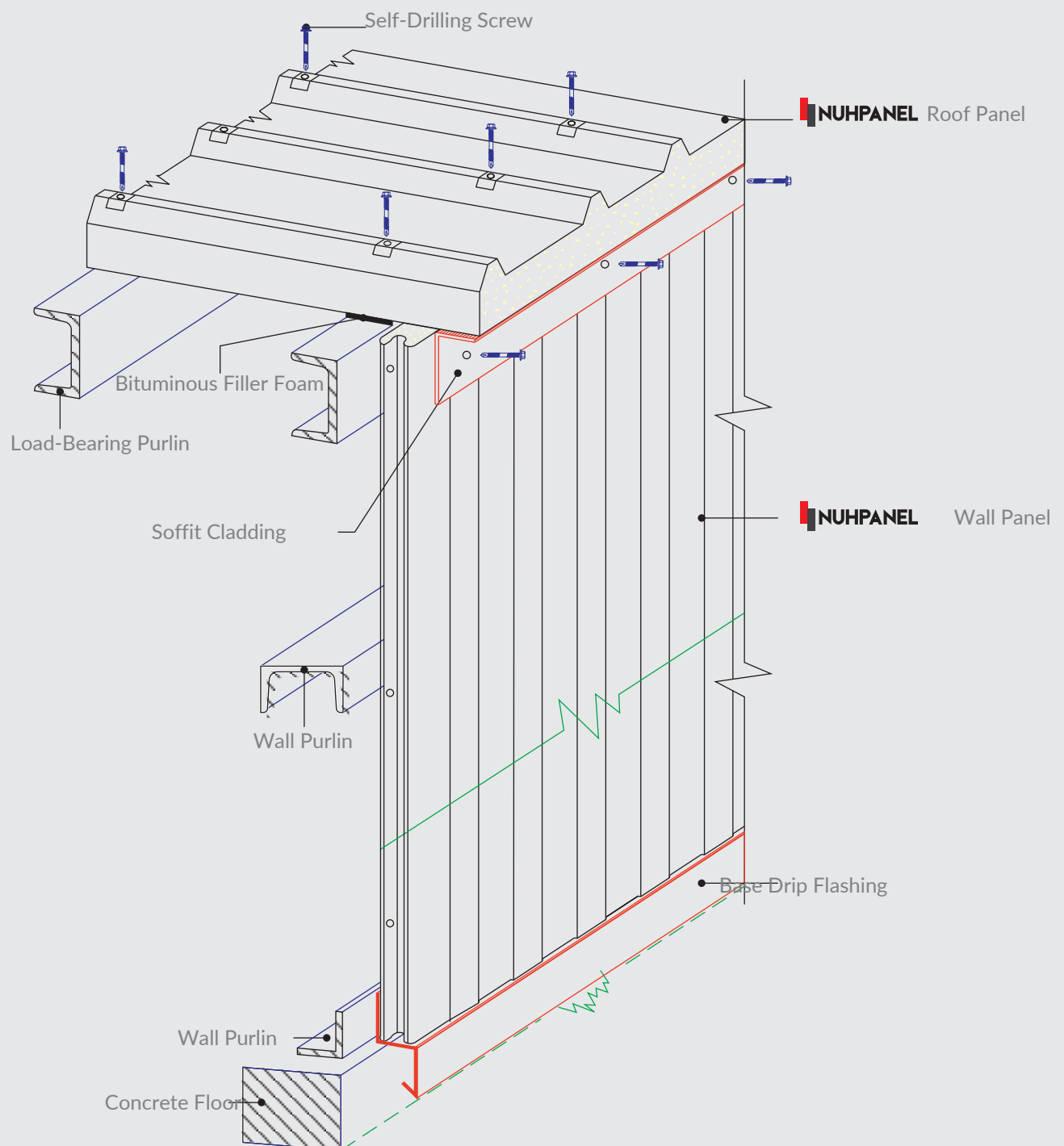
TECHNICAL SPECIFICATIONS		24 / 1000					37 / 1000					51 / 900				
EFFECTIVE WIDTH		1000					1000					900				
RIB HEIGHT		24					37					51				
NUMBER OF RIBS		7					5					5				
SHEET THICKNESS		0.50 - 1.00 MM					0.50 - 1.00 MM					0.50 - 1.20 MM				
PAINT TYPE		POLYESTER / PVDF					POLYESTER / PVDF					POLYESTER / PVDF				
COLOUR		RAL 9002 ^a					RAL 9002 ^a					RAL 9002 ^a				

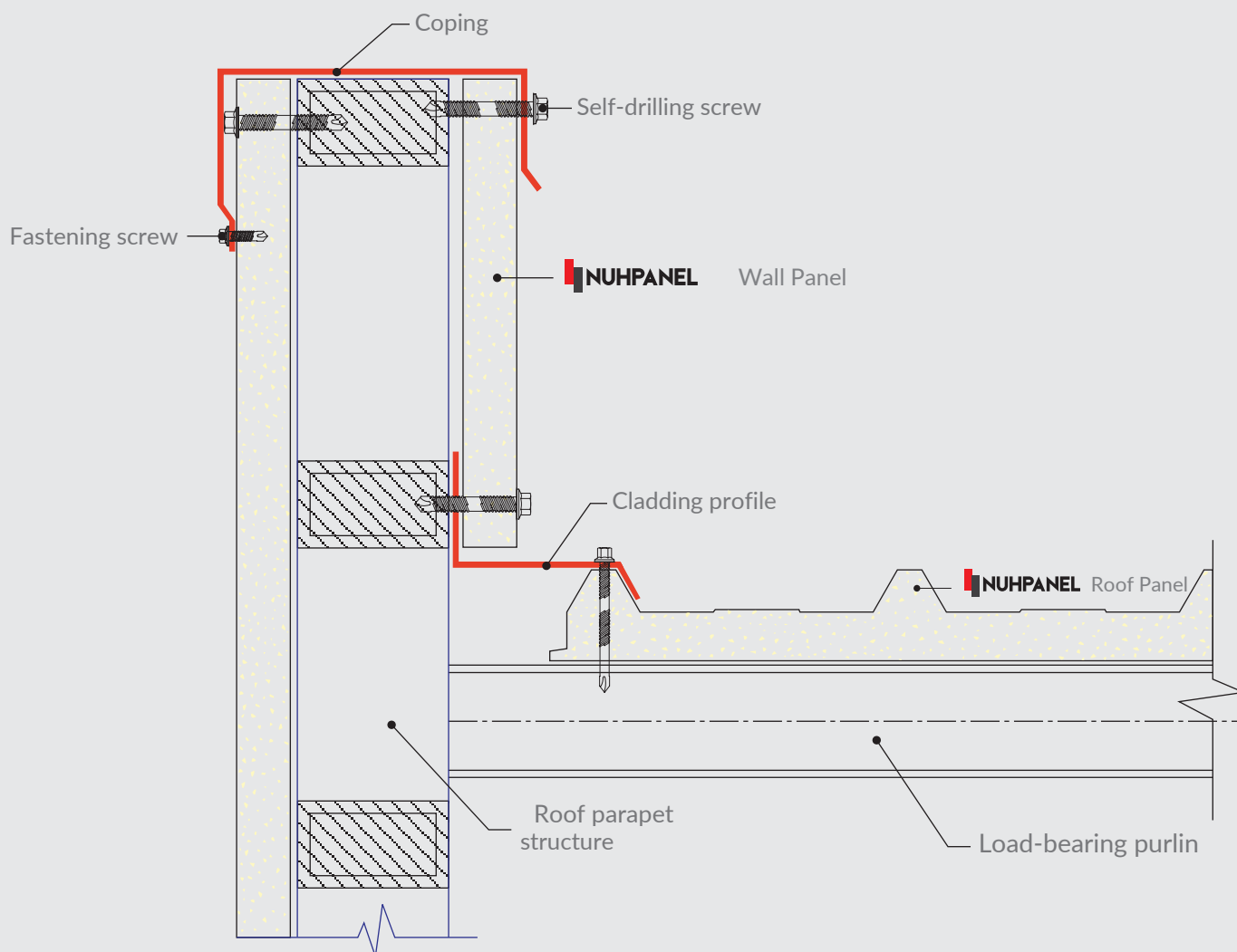
LOAD BEARING TABLE											LIMIT VALUE (L/200)				
SHEET THICKNESS	100	150	200	250	300	100	150	200	250	300	100	150	200	250	300
	DISTRIBUTED LOAD (P = KG/M ²)					DISTRIBUTED LOAD (P = KG/M ²)					DISTRIBUTED LOAD (P = KG/M ²)				
0.5	382	170	83	43	25	400	180	100	65	44	813	361	203	130	90
0.6	500	223	110	56	33	490	220	130	80	55	995	442	249	159	111
0.7	630	280	139	72	42	580	260	150	93	64	1179	524	295	189	131
0.8	790	343	168	87	50	665	305	170	108	75	1366	607	342	219	152
0.9	950	406	197	102	58	750	350	190	123	86	1556	691	389	249	173
1.00	1110	469	226	117	66	835	395	210	138	97	1745	775	436	279	194

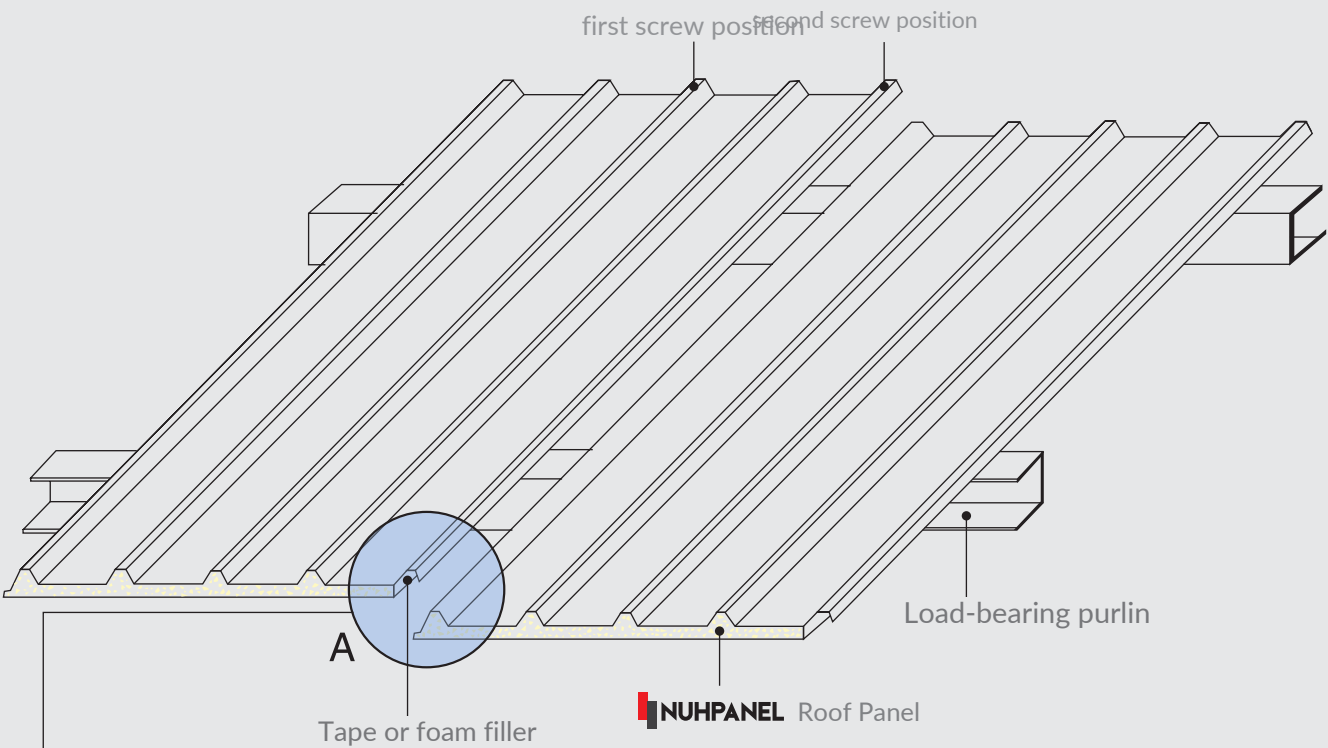
ACCESSORIES and JOINT DETAILS



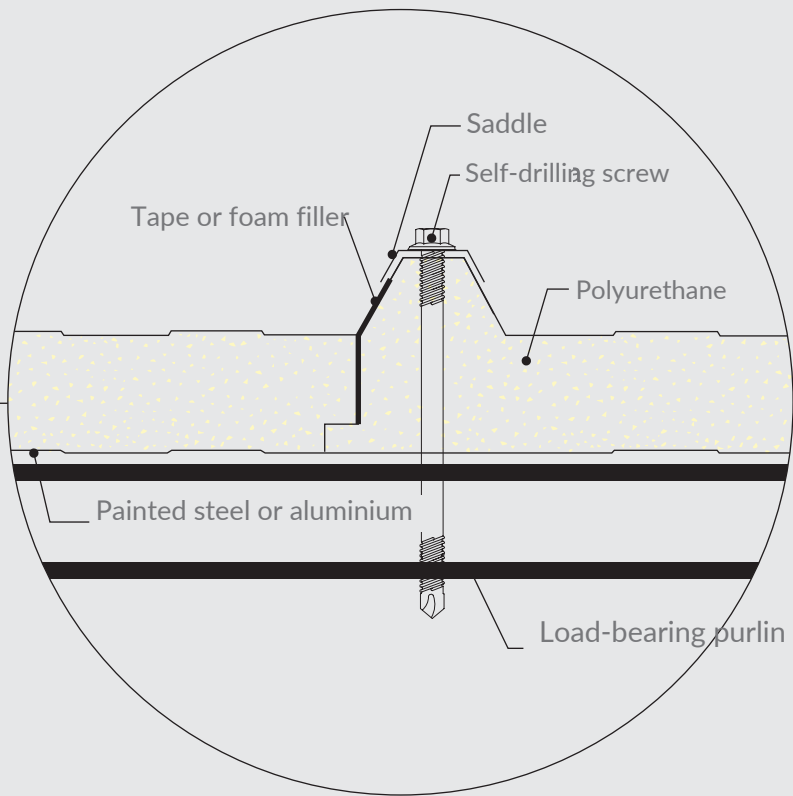
ACCESSORIES

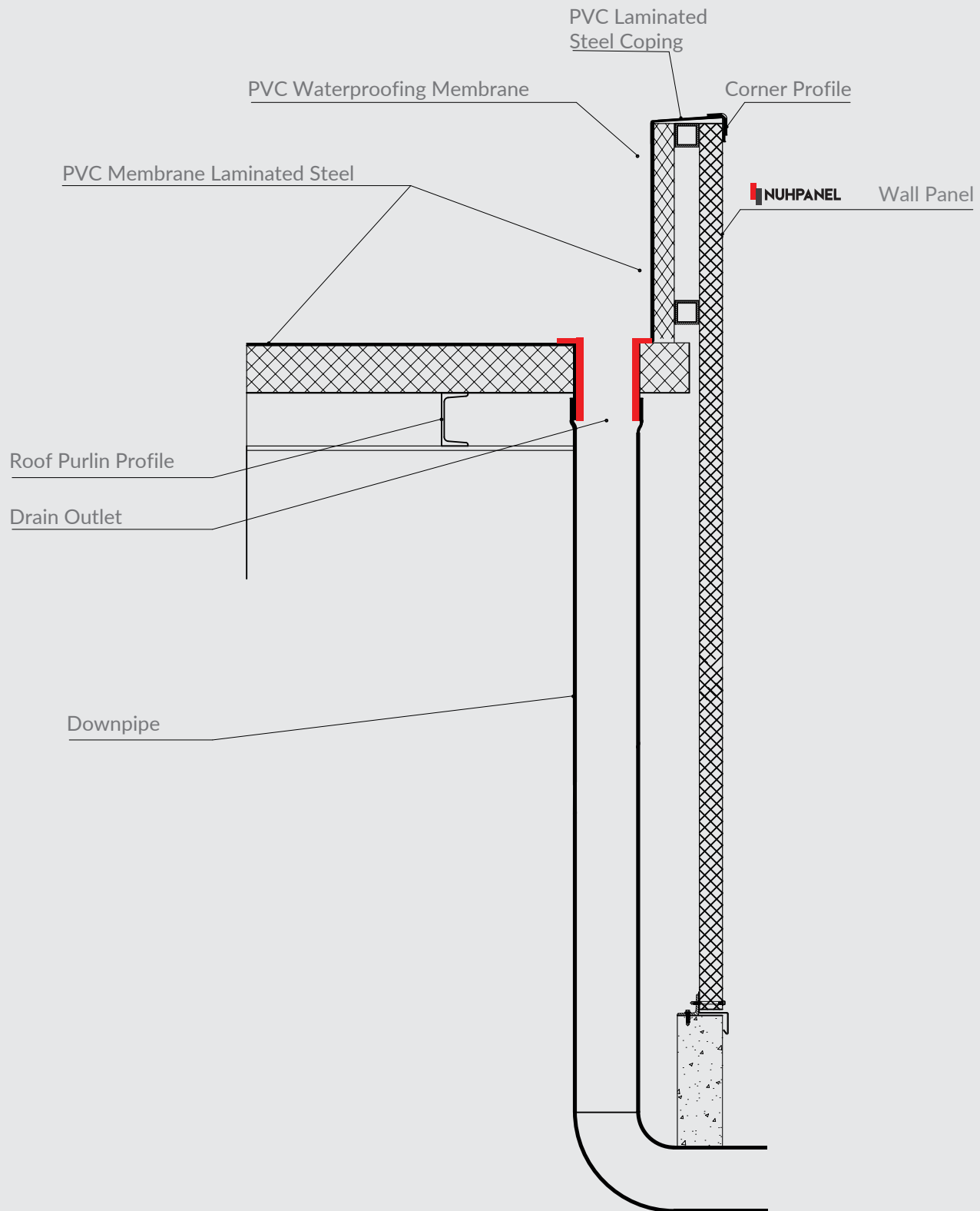


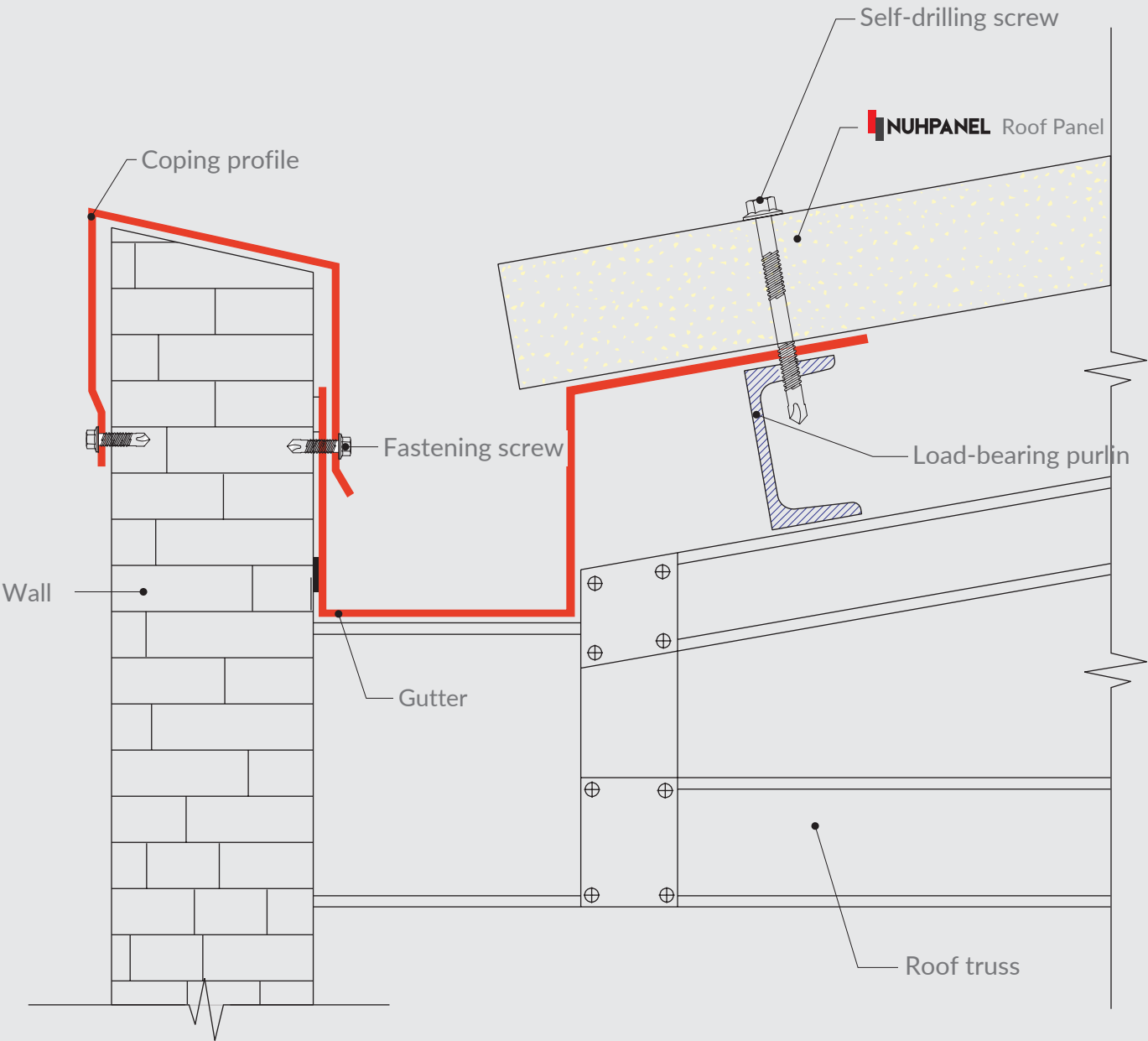


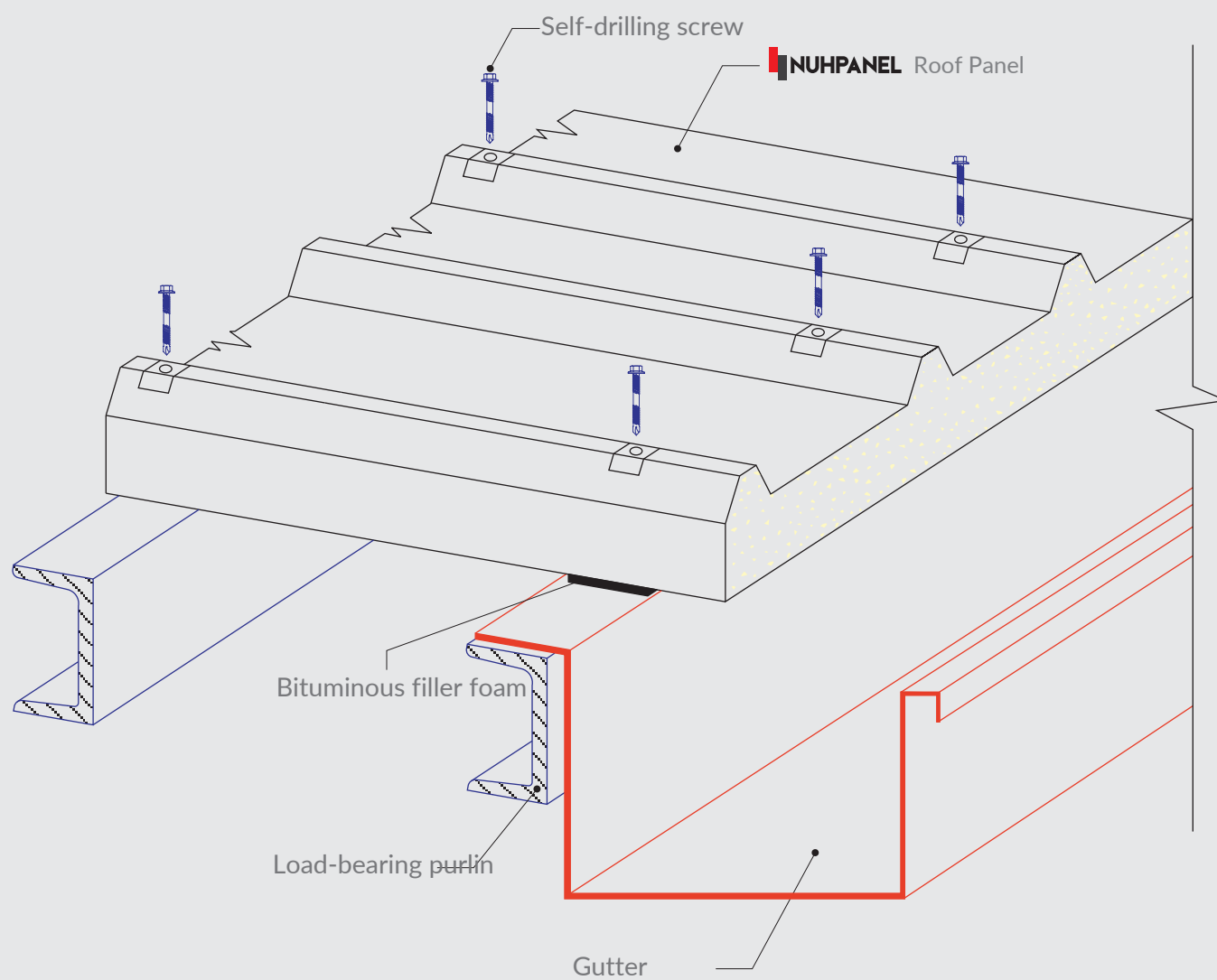


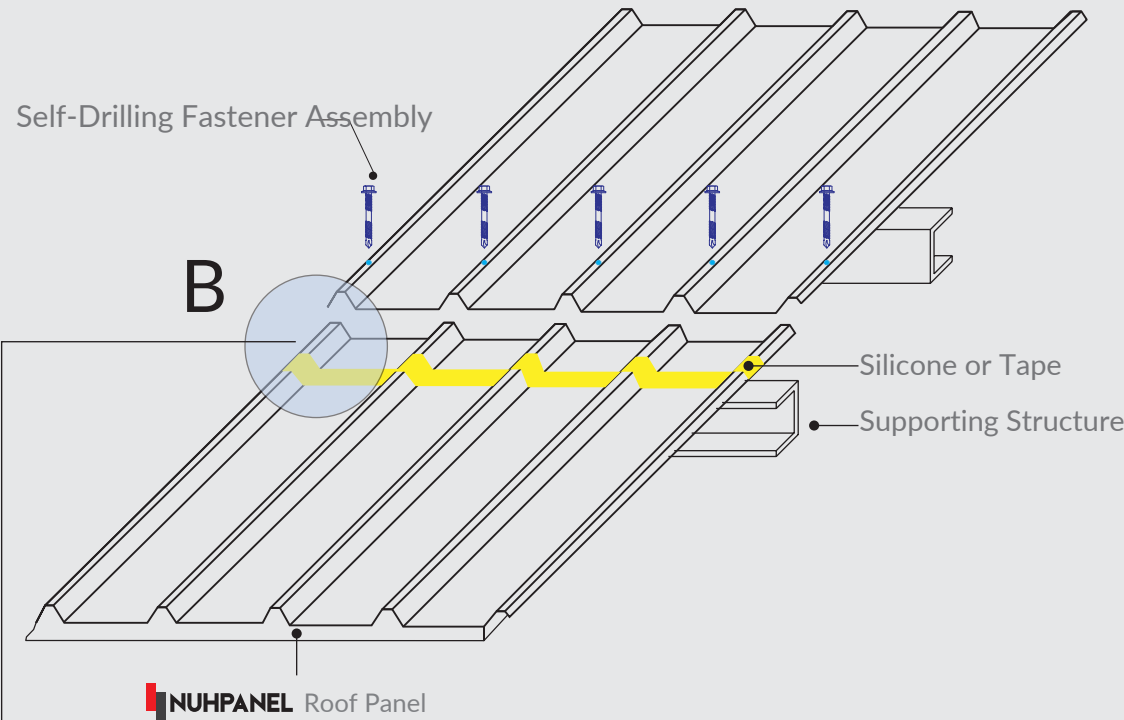
DETAIL AT POINT A



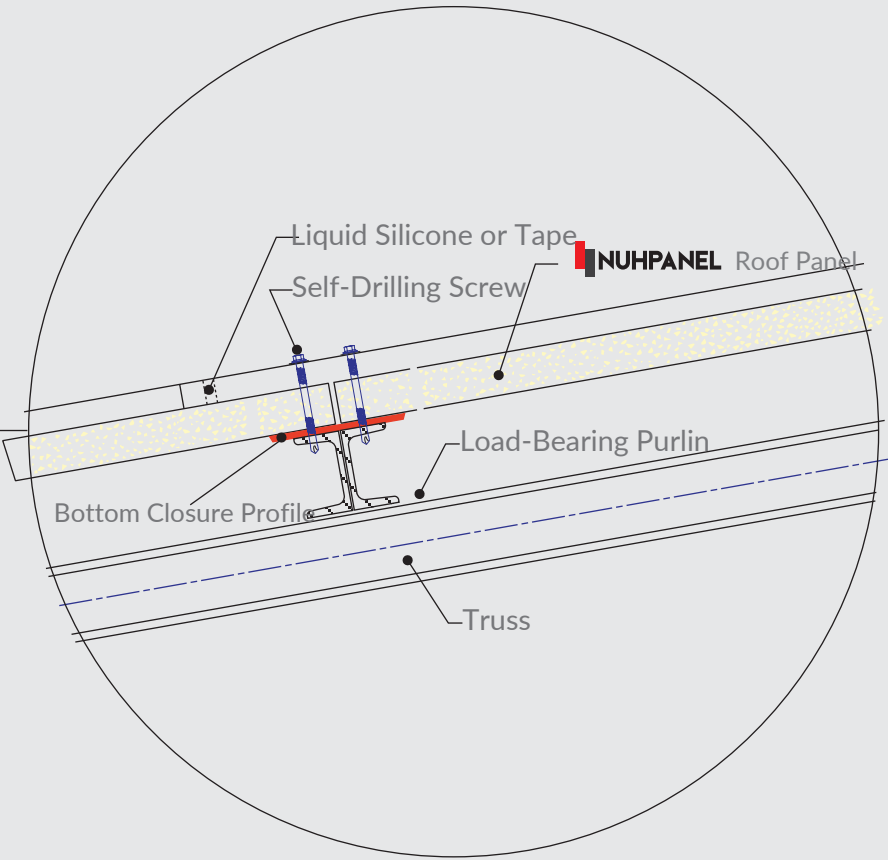


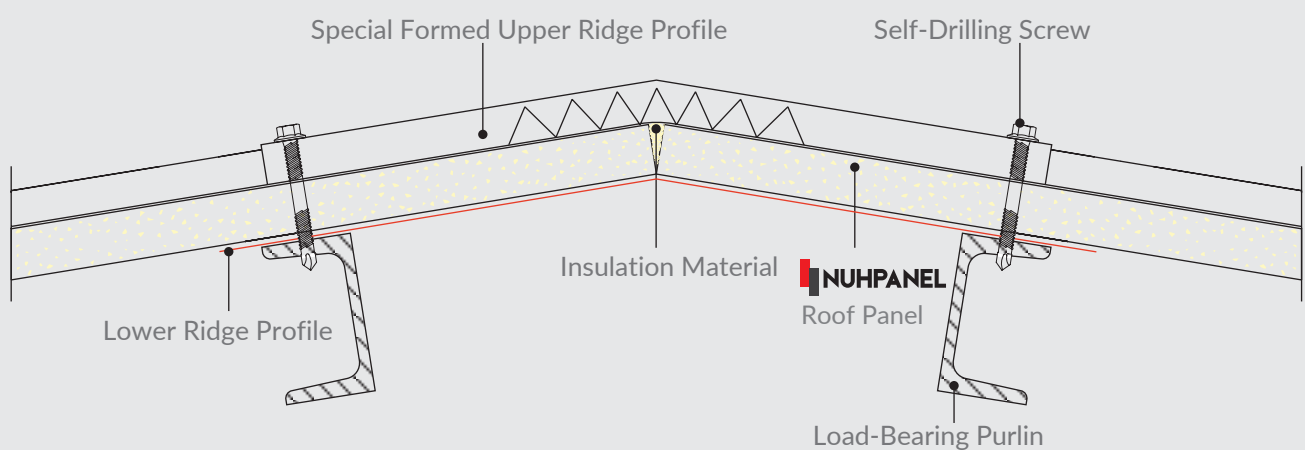
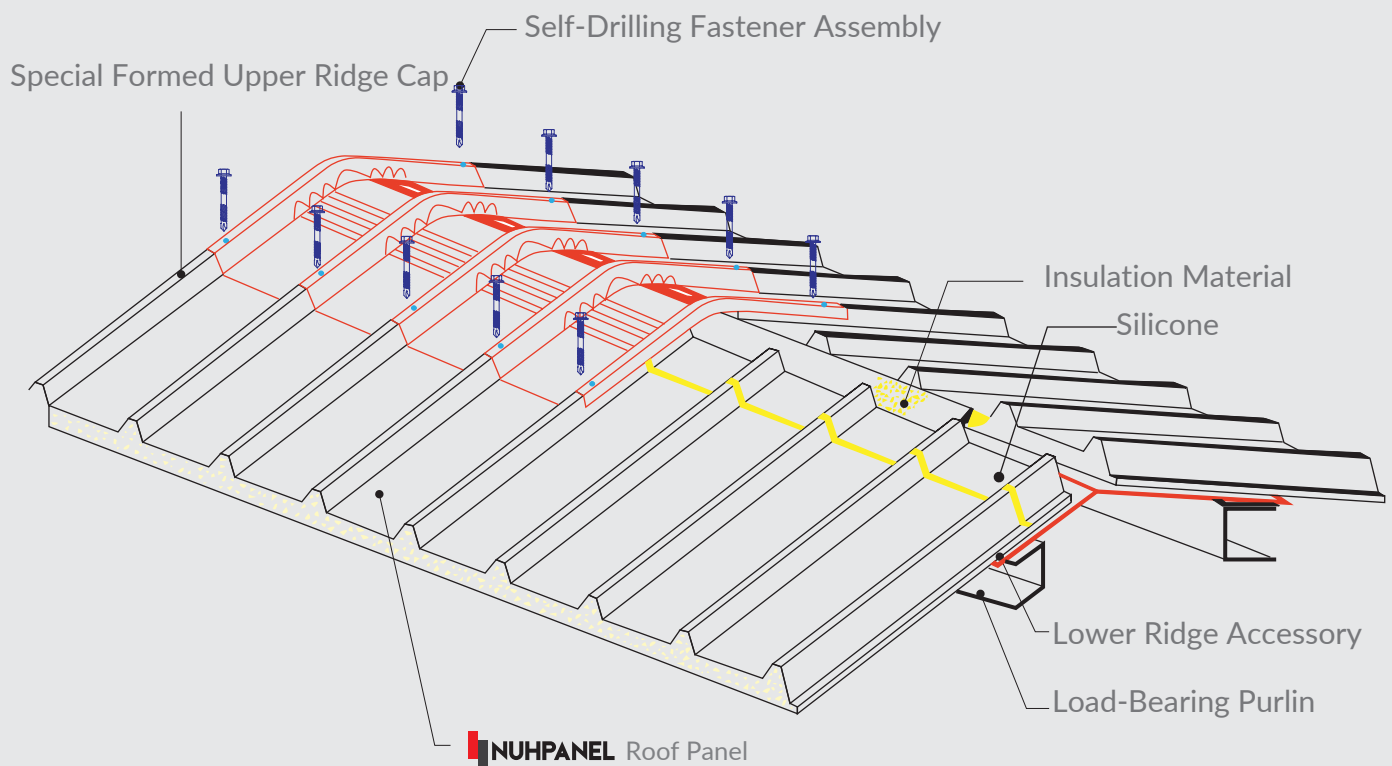


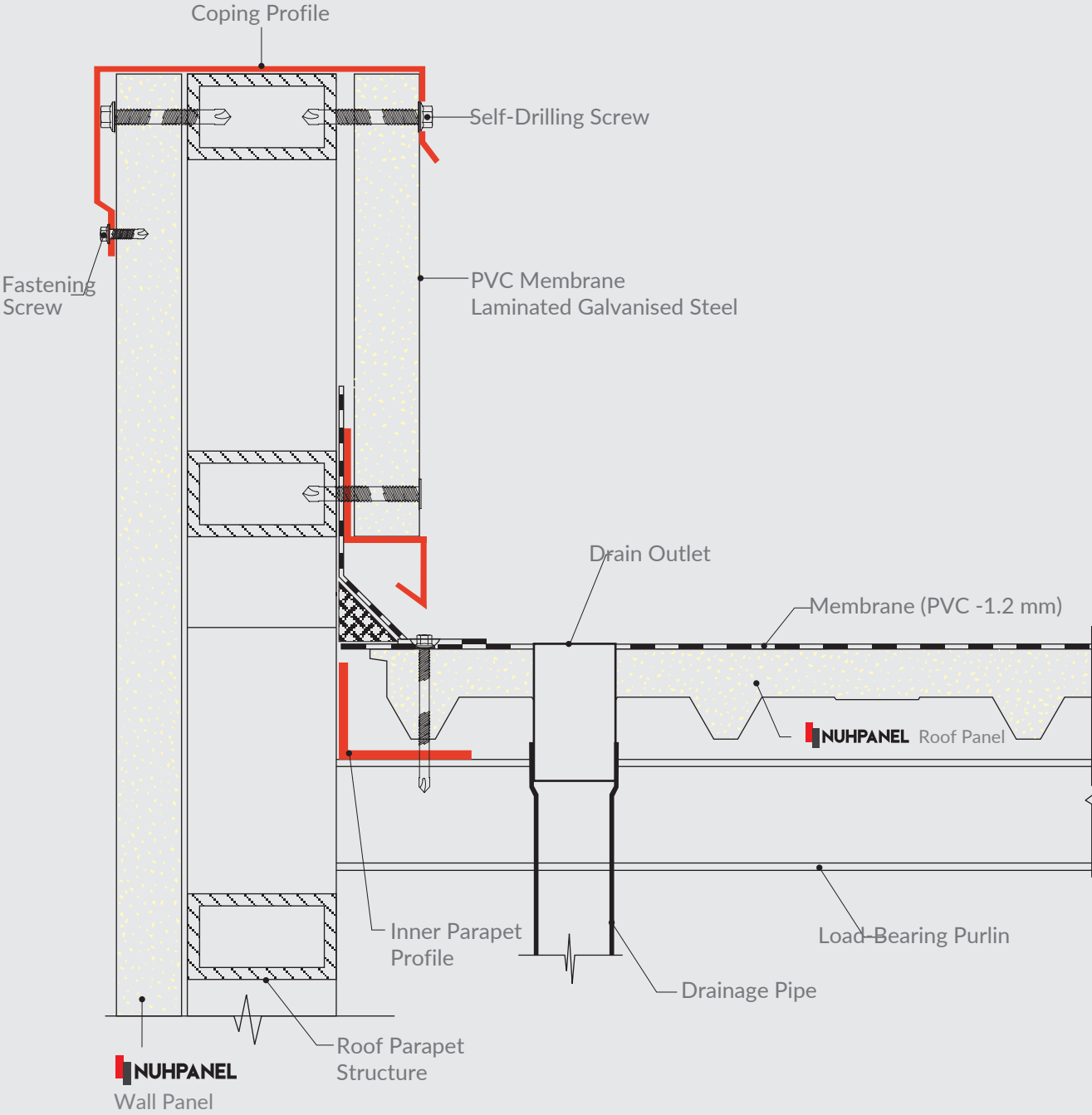


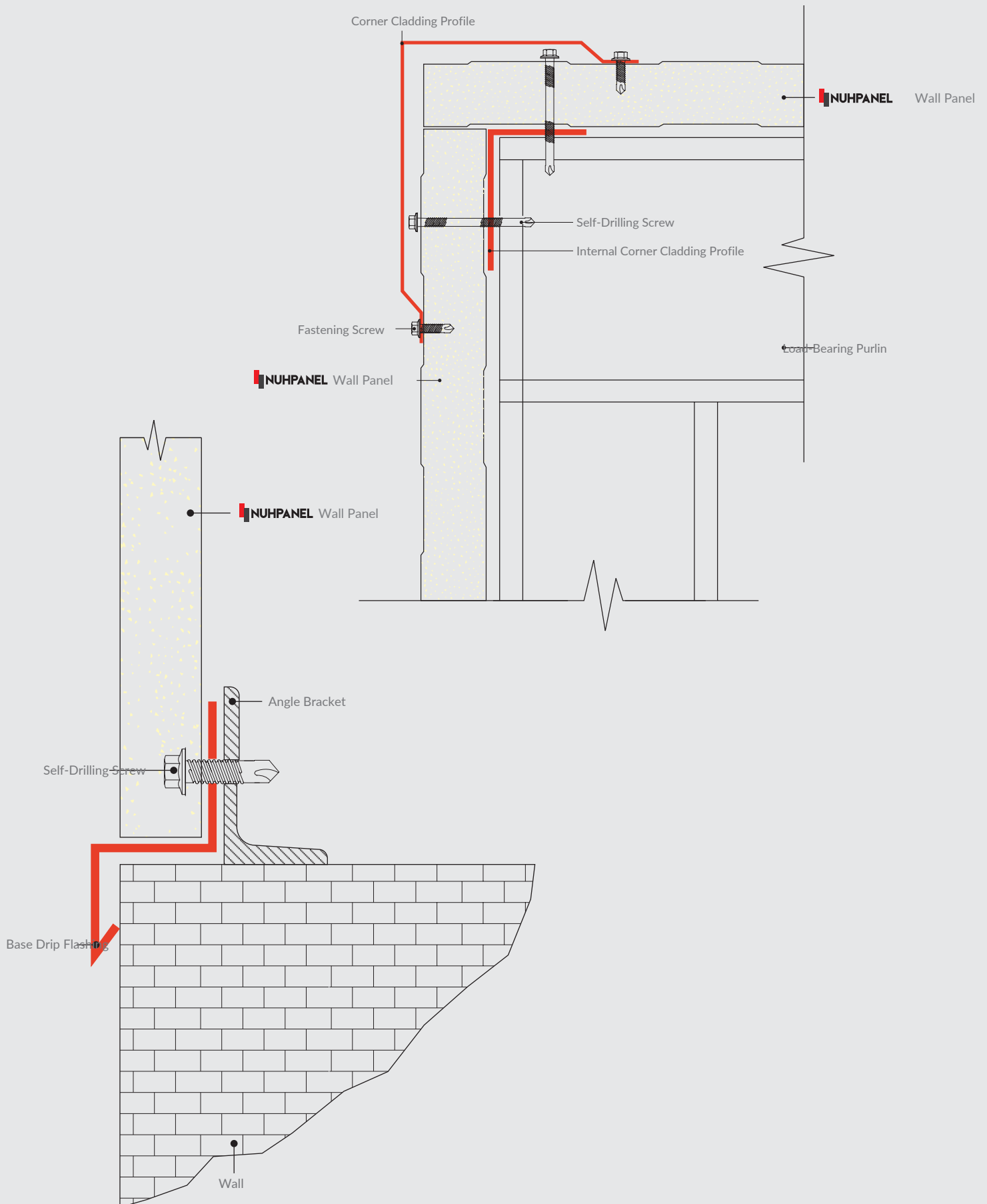


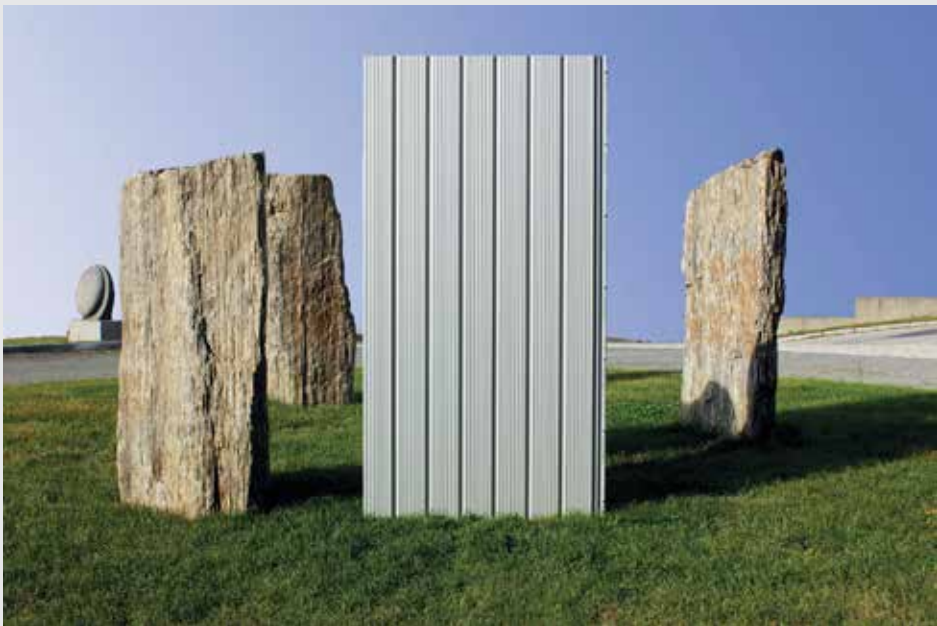
DETAIL AT POINT B











ASAŞ-Adapazarı





FERRERO-Manisa



PARKCAM-Bozüyük



Continuous Single-Piece Wall Panel
Delivers Visual Richness, Aesthetics and Distinction.

NURUS-Ankara







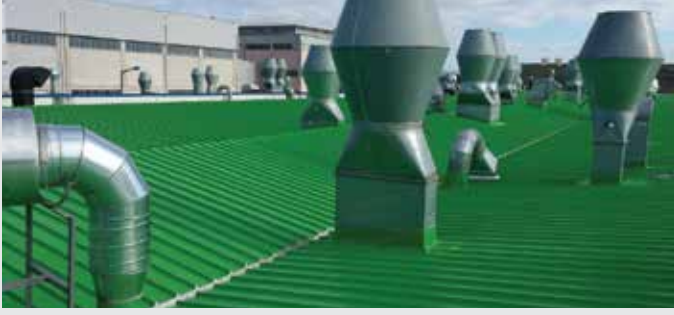


TAYAŞ-Gebze



TATAROĞLU-Dilovası





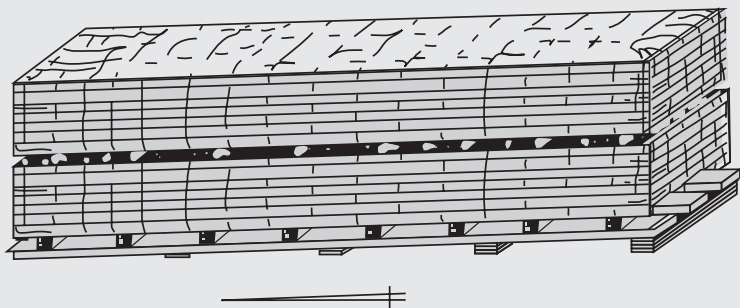
SANDOZ İLAÇ-Gebze



MİGROS-Samsun





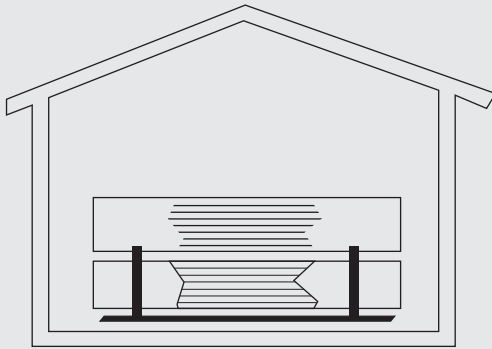


Storage
Stacks are placed on flat, firm ground at the site so that they are protected from dirt, moisture and damage. Water accumulation between the elements must always be prevented by laying the stack at a slight incline. The packaging layer is cut open at the front so that the stack can breathe.

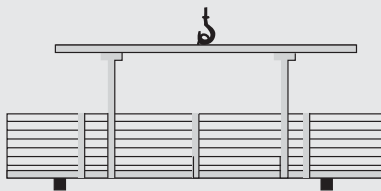
If the panels are not to be installed straight away they must be protected from direct sunlight and from bad weather, otherwise the protective film may bond to the surface, which causes difficulty when the protective layer is removed. No more than two bales may be stacked on top of one another. If aluminium panels are to remain on site for a long period, the stacks must be opened and the panels stored rib over rib, protected from the weather.

LOADING (CONTAINER)		
THICKNESS (S)	ROOF PANEL	WALL PANEL
40 mm	68 pcs	90 pcs
50 mm	60 pcs	78 pcs
60 mm	52 pcs	66 pcs

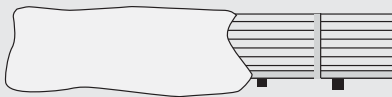
LOADING (TRUCK - 13.60 m)		
THICKNESS (S)	(13 m) ROOF P.	(13 m) WALL P.
40 mm	1040 m² / 84 pcs	1430 m² / 108 pcs
50 mm	806 m² / 68 pcs	1092 m² / 90 pcs
60 mm	780 m² / 60 pcs	936 m² / 78 pcs



When stacking, the spacing of the supports underneath must not exceed 150 cm. Under suitable conditions and for short periods a maximum of 3 packs may be stacked. It is recommended not to stack more than 2 packs.

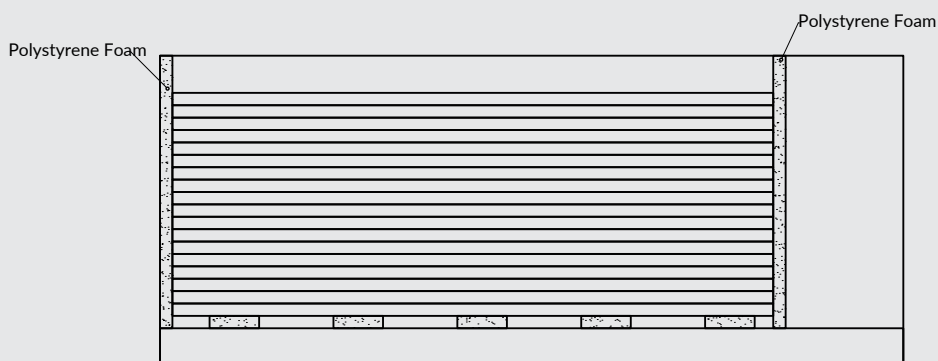


Packs must be lifted with slings at a minimum of two balanced points. Care must be taken that the sling does not compress the panels while lifting.

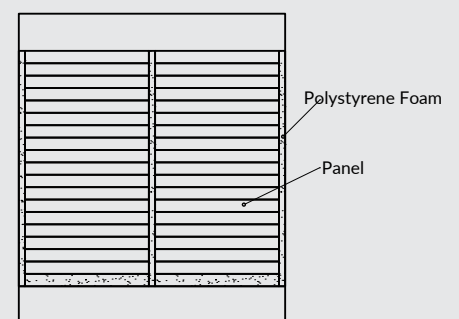


Rock wool panels must under no circumstances be exposed to rain while they are waiting in storage.

NUHPANEL CONTAINER LOADING DETAIL



NUHPANEL CONTAINER LOADING DETAIL







GOSB İhsan Dede Cad. No.111 41480 Gebze - Kocaeli / T TURKEY
T +90 444 4 684 | **NUH** F +90 262 751 07 78 E nuhpanel@nuhpanel.com.tr

www.nuhpanel.com.tr

