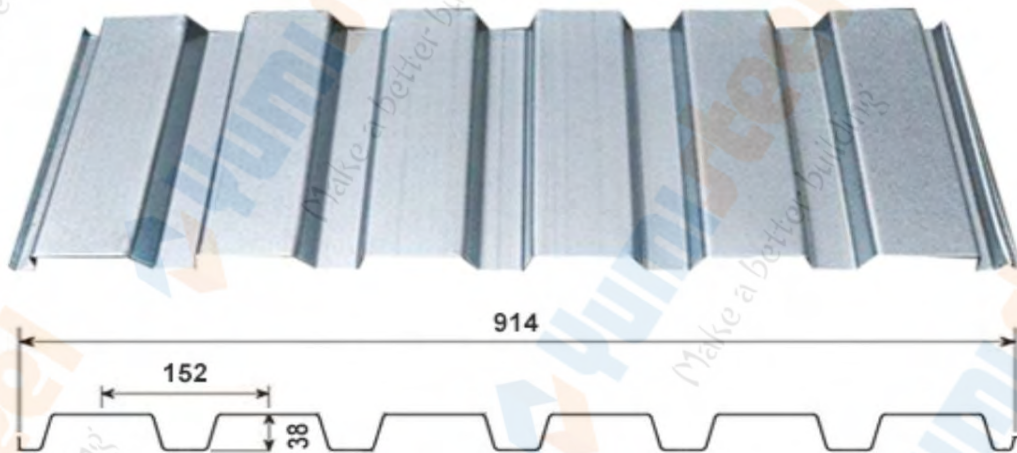


### Basic information:



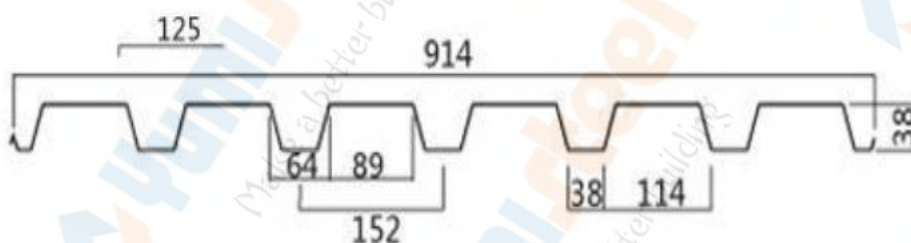
YX38-152-914 profiled metal panel can be used as roof bottom panel, wall panel, and floor steel deck. The construction of this model type is very convenient, the effect is beautiful after completion, and the price is relatively affordable. It is a good panel choice for some 4S shops, factories, and middle and high-rise buildings. When used as a roof panel, it can be used as the bottom liner of an inverted roof, with high bearing capacity, saving the number of purlins, and forming a complete roofing system together with hard thermal insulation materials and flexible waterproofing membranes. As steel deck, it's also one kind of opened type floor decking sheets.

### Advantages:

1. The covering width is large, and the number of panels required is relatively reduced, thus saving time and cost in the transportation and installation process;
2. The specially designed profiled end makes the overlap and installation very fast;
3. High bearing capacity, allowing a large design span, saving the amount of purlins in the system;
4. The wave crest width is large and the opening is small to facilitate the joint installation of insulation materials and flexible waterproof membranes;
5. The spacing of the plate ribs is a standard modulus, which saves the amount of fasteners in the system;
6. The side (web) perforated plate meets the requirements of acoustic design, making the system design more flexible.

### Technical data:

#### • Sectional properties:



Thickness/mm	Yield Strength(MPa)	Weight(Kg/m <sup>2</sup> )	I(mm <sup>4</sup> /m)	S(mm <sup>3</sup> /m)	Sn(mm <sup>3</sup> /m)
0.75	≥345	8.30	252.5	10.08	10.48
0.90	≥345	9.96	309.5	12.94	13.24
1.20	≥345	13.28	412.4	17.26	18.08
1.50	≥345	16.60	515.6	21.57	23.31

Note: I is for Moment of inertia; S is for Positive bending moment coefficient; Sn is for Negative bending moment coefficient. These data was calculated by 345MPA(≈50KSI)

Thickness/mm	Yield Strength(MPa)	Weight(Kg/m <sup>2</sup> )	I(mm <sup>4</sup> /m)	S(mm <sup>3</sup> /m)	Sn(mm <sup>3</sup> /m)
0.75	≥235	8.30	203.5	9.63	10.16
0.90	≥235	9.96	255.3	11.67	12.09
1.20	≥235	13.28	364.6	15.92	16.08
1.50	≥235	16.60	442.4	20.25	19.97

Note: I is for Moment of inertia; S is for Positive bending moment coefficient; Sn is for Negative bending moment coefficient. These data was calculated by 235MPA(≈34KSI)

• As roof deck, uniform total load table:

No. of Spans	Steel deck THK(mm)	Slab THK(mm)										
			130	140	150	160	170	180	190	200	210	220
1	0.75	Uniform total load (kg/m <sup>2</sup> )	469	366	293	270	216	200	171	151		
	0.90		586	454	361	332	265	244	210	181	156	
	1.20		810	620	488	447	357	327	273	234	205	188
	1.50			771	605	552	440	400	332	283	244	224
2	0.75		503	420	352	332	277	259	225	200	176	161
	0.90		620	513	430	403	338	317	278	244	215	200
	1.20		825	684	576	540	455	425	371	327	288	268
	1.50			864	727	679	575	537	469	410	366	342
3	0.75		625	522	439	413	345	322	283	244	210	193
	0.90		767	635	537	503	423	395	347	298	259	237
	1.20			850	718	669	565	527	464	400	342	312
	1.50				903	842	716	669	581	493	420	386

Notes:

1. Load tables are calculated using section properties based on the steel design thickness;

2. Loads shown in the shaded areas are governed by the live load deflection not in excess of L/240 of the span. A dead load of 0.5KN/m<sup>2</sup> has been included

• As floor deck, uniform total load table (Steel grade: Q235 ( $\approx 34\text{KSI}$ )):

No. of Spans	Steel deck THK(mm)	Slab THK(mm)		130	140	150	160	170	180	190	200	210	220
		Design criteria											
		Uniform total load (kg/m <sup>2</sup> )											
1	0.75	Fy=33ksi		515	427	358	322	280	250	231	202	185	165
		Deflection	L/240		402	319	283	239	207	188	163	148	131
			L/180								203	185	163
2	0.75	Fy=33ksi		490	407	344	307	266	238	222	192	178	158
3		Fy=33ksi		607	505	427	385	334	299	275	241	224	200
1		0.90	Fy=33ksi		632	524	441	397	344	306	280	246	229
	Deflection		L/240	622	480	383	336	280	245	222	192	175	153
			L/180							275	236	217	190
2	0.90	Fy=33ksi		604	500	422	380	329	294	271	241	222	195
3		Fy=33ksi		750	622	524	475	412	369	339	300	278	246
1		1.20	Deflection	L/240									
	L/180								168	349	300	273	236
	Fy=33ksi			812	676	568	517	449	402	368	324	300	266
3	1.20	Fy=33ksi		1008	837	705	644	558	501	456	402	375	334
Deflection											402	368	314
		L/240											
1	1.50	Fy=33ksi		1066	881	739	676	583	523	476	417	388	344
		Deflection	L/240	1013	773	607	539	441	382	334	285	261	226
			L/180						210	432	363	331	285
2	1.50	Fy=33ksi		1042	866	729	666	576	517	471	412	385	344
3		Fy=33ksi		1291	1071	905	829	717	644	583	515	480	427
Deflection		L/240									495	454	388

Notes:

1. Load tables are calculated using section properties based on the steel design thickness;

2. A dead load of 0.5KN/m<sup>2</sup> has been included for deflection only.

• As floor deck,uniform total load table(Steel grade:Q345(≈50KSI)):

No. of Spans	Steel deck THK(mm)	Slab THK(mm)		130	140	150	160	170	180	190	200	210	220
		Design criteria											
		Uniform total load (kg/m <sup>2</sup> )											
1	0.75	Fy=50ksi		646	583	490	446	399	334	314	275	256	227
		Deflection	L/240	462	350	267	230	193	149	140	115	101	81
			L/180	612	461	357	308	261	199	182	152	135	109
2		Fy=50ksi		573	524	460	416	371	311	294	260	240	212
		Deflection	L/240	573	524	461	417	372	312	295	261	239	203
			L/180	573	525	460	416	371	311	294	260	240	212
3	Fy=50ksi		651	593	544	505	457	390	368	324	302	266	
	Deflection	L/240	651	593	505	441	374	285	261	212	190	156	
		L/180	651	593	543	504	456	377	343	284	255	212	
1	0.90	Fy=50ksi		900	744	627	571	510	427	402	354	329	290
		Deflection	L/240	563	422	328	282	238	182	167	138	121	99
			L/180	749	563	437	380	322	244	222	183	163	134
2		Fy=50ksi		827	715	603	549	491	412	388	344	319	281
		Deflection	L/240	827	715	603	549	491	412	388	334	300	246
			L/180	827	715	604	550	492	413	389	345	320	281
3	Fy=50ksi		939	856	749	683	612	512	480	427	397	351	
	Deflection	L/240	939	798	617	541	458	346	314	261	234	193	
		L/180	939	856	749	683	595	466	422	349	314	261	
1	1.20	Fy=50ksi		1232	1022	856	783	701	585	549	485	451	398
		Deflection	L/240	749	563	437	380	322	244	222	183	163	134
			L/180	1003	754	578	507	432	329	300	246	222	183
2		Fy=50ksi		1174	974	822	751	673	563	529	466	434	383
		Deflection	L/240	1175	974	822	752	674	564	530	441	400	333
			L/180	1175	974	822	751	673	563	529	466	434	384
3	Fy=50ksi		1453	1208	1018	934	838	700	656	578	541	481	
	Deflection	L/240	1418	1066	822	724	616	465	421	349	314	261	
		L/180	1452	1208	1018	929	804	619	558	461	419	348	

Notes:

1.Load tables are calculated using section properties based on the steel design thickness;

2.A dead load of 0.5KN/m<sup>2</sup> has been included for deflection only.

Material certificate reference:

