



# DECO PANEL HORIZONTAL



**jaga**

A modern classic

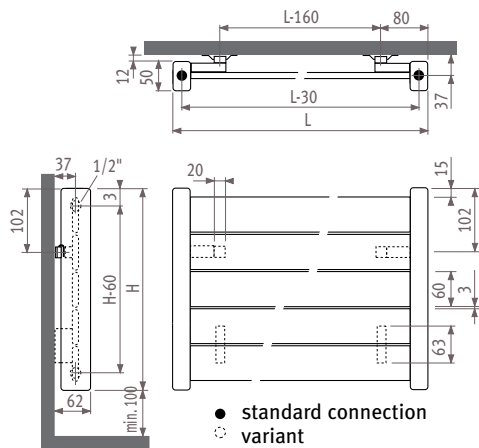
Jaga Heating Products (UK) Ltd | [www.jaga.co.uk](http://www.jaga.co.uk)  
T: +44 (0)1531 631 533 | F: +44 (0)1531 631 534 | [jaga@jaga.co.uk](mailto:jaga@jaga.co.uk)

# Deco Panel Horizontal

## Dimensions

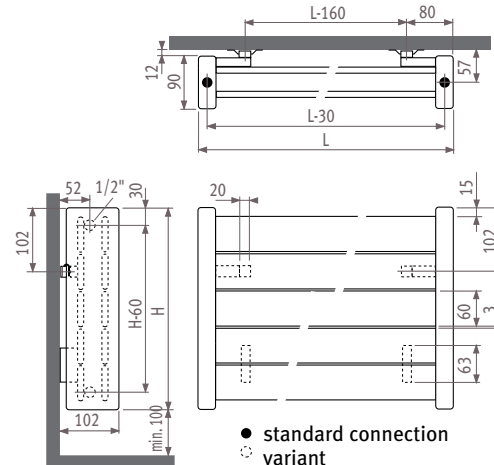
### Panel Horizontal Single

Product code wall-mounted: PHSW  
Product code freestanding: PHSF



### Panel Horizontal Double

Product code wall-mounted: PHDW  
Product code freestanding: PHDF



L >	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	
H >	280	340	400	470	530	590	660	720	780	840	910	970

## Connections

### Standard connection

Order code: 18.

Connection 18 or 81.

### Side end connection

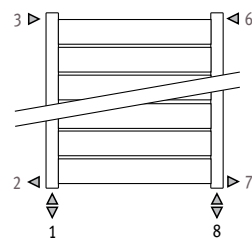
One-sided: order code 32 or 67

Cross-over: order code 37 or 62

### Single point connection

Order code: 11 (left) or 88 (right)

Always use a vertical diffusion tube (Ø 10-12mm) of min. length 100mm and a reduction washer.



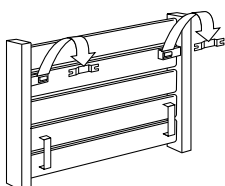
### Key:

1 = flow,

2 = return

## Fixing

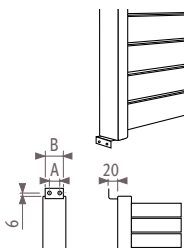
### Standard wall fixing



All dimensions in mm

## Options

### Side end fixing



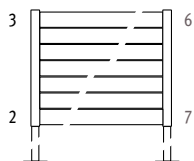
	PHSS	PHDS
A	20	37
B	40	68

When ordering side end fixings, a side end connection is not possible.

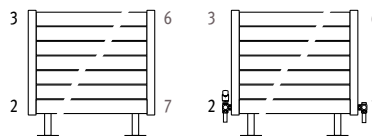
Non-standard fixings are welded to the radiator and cannot be changed or reordered afterwards. Please check carefully if the desired options are ordered correctly. Incorrect orders will not be taken back.

### For positioning of freestanding model

#### PHDS - Single



#### PHDF - Double



#### Single or Double horizontal radiator

Maximum height 470mm

PHDF has an option connection set of 31 or 33

#### Order codes:

**PHSF** = single radiator from 2200mm in length use 2 feet, from 2400 in length use 3 feet

**PHDF** = double radiator from 2200mm in length use 2 feet, from 2400 in length use 3 feet

To create the order code begin by using the radiator code PHSF or PHDF, then the height in cm, the width in cm, then the colour code followed by the connection.

Example order code: PHSF. 100 028 201/LL or RR

## Outputs

Outputs in watts at 75/65/20°C & 55/45/20°C, in accordance with EN442

### Deco Panel Horizontal Single

code height length colour connection (Example order code shown is for a 280mm high radiator, 1800mm long)  
 ORDER CODE: PHSW 028 180 233 /18

Height	Length >	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000
280	75/65/20	270	324	378	432	486	540	594	648	702	756	810
	55/45/20	135	162	189	217	244	271	298	325	352	379	406
340	75/65/20	344	413	481	550	619	688	757	825	894	963	1032
	55/45/20	173	208	242	276	311	346	380	415	449	484	519
400	75/65/20	418	501	585	668	752	835	919	1002	1086	1170	1253
	55/45/20	210	252	295	336	379	420	463	505	547	589	631
470	75/65/20	491	589	687	786	884	982	1080	1178	1276	1375	1473
	55/45/20	248	297	347	397	446	496	545	595	644	694	744
530	75/65/20	563	676	789	901	1014	1127	1239	1352	1465	1577	1690
	55/45/20	285	342	399	456	513	570	627	684	742	798	855
590	75/65/20	635	762	889	1015	1142	1269	1396	1523	1650	1777	1904
	55/45/20	322	386	451	515	579	644	708	772	837	901	966
660	75/65/20	705	846	987	1128	1268	1409	1550	1691	1832	1973	2114
	55/45/20	358	430	502	574	645	716	788	860	932	1003	1075
720	75/65/20	773	928	1083	1237	1392	1547	1701	1856	2011	2165	2320
	55/45/20	394	473	552	631	710	789	867	946	1025	1104	1183
780	75/65/20	841	1009	1177	1345	1513	1681	1849	2017	2185	2354	2522
	55/45/20	430	515	601	687	773	859	945	1030	1116	1202	1288
840	75/65/20	906	1087	1269	1450	1631	1812	1994	2175	2356	2537	2719
	55/45/20	464	557	650	743	835	928	1021	1114	1207	1299	1392
910	75/65/20	970	1164	1358	1552	1746	1940	2134	2329	2523	2717	2911
	55/45/20	498	597	697	796	896	996	1095	1195	1295	1394	1494
970	75/65/20	1033	1239	1446	1652	1859	2065	2272	2478	2685	2891	3098
	55/45/20	531	637	744	850	956	1062	1169	1275	1381	1487	1594

#### Supplied as Standard

- Colours: 001 Sandblast grey metallic 201 white or 233 traffic white
- Connection 18 underneath
- Chrome-plated air vent and drain plug
- Wall fixing

All dimensions are shown in millimetres



Output measured in accordance with EN442, at a water temperature of 75/65°C and a room temperature of 20°C (T=50).

## Outputs

Outputs in watts at 75/65/20°C & 55/45/20°C, in accordance with EN442

### Deco Panel Horizontal Double

code height length colour connection (Example order code shown is for a  
ORDER CODE: PHDW 028 180 001 /18 2800mm high radiator, 1800mm long.)

Height	Length >	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000
280	75/65/20	526	632	737	842	948	1053	1158	1264	1369	1474	1579
	55/45/20	270	325	379	433	487	541	595	650	704	758	812
340	75/65/20	644	772	901	1030	1158	1287	1416	1544	1673	1802	1931
	55/45/20	331	397	464	530	596	662	729	794	861	927	993
400	75/65/20	757	909	1060	1212	1363	1515	1666	1818	1969	2121	2272
	55/45/20	390	468	546	624	702	780	858	936	1014	1092	1170
470	75/65/20	869	1042	1216	1390	1564	1737	1911	2085	2259	2432	2606
	55/45/20	448	537	626	716	805	895	984	1074	1163	1253	1342
530	75/65/20	978	1173	1369	1564	1760	1955	2151	2346	2542	2737	2933
	55/45/20	504	605	706	806	907	1008	1109	1209	1311	1411	1512
590	75/65/20	1084	1301	1518	1735	1951	2168	2385	2602	2819	3035	3252
	55/45/20	559	671	783	895	1006	1118	1230	1342	1454	1565	1677
660	75/65/20	1189	1426	1664	1902	2139	2377	2615	2852	3090	3328	3566
	55/45/20	614	736	859	982	1104	1227	1350	1472	1595	1717	1840
720	75/65/20	1291	1549	1807	2066	2324	2582	2840	3098	3357	3615	3873
	55/45/20	667	800	933	1067	1201	1334	1467	1600	1734	1867	2001
780	75/65/20	1392	1670	1948	2227	2505	2783	3062	3340	3618	3897	4175
	55/45/20	719	863	1007	1151	1295	1438	1583	1726	1870	2014	2158
840	75/65/20	1490	1789	2087	2385	2683	2981	3279	3577	3875	4173	4471
	55/45/20	771	925	1079	1233	1387	1542	1696	1850	2004	2158	2312
910	75/65/20	1588	1905	2223	2540	2858	3175	3493	3810	4128	4445	4763
	55/45/20	822	986	1151	1315	1479	1644	1808	1972	2137	2301	2466
970	75/65/20	1683	2020	2356	2693	3030	3366	3703	4039	4376	4713	5049
	55/45/20	872	1046	1220	1395	1569	1743	1918	2092	2266	2441	2615

#### Supplied as Standard

- Colours: 001 Sandblast grey metallic 201 white or 233 traffic white
- Connection 18 underneath
- Chrome-plated air vent and drain plug
- Wall fixing

All dimensions are shown in millimetres



Output measured in accordance with EN442, at a water temperature of 75/65°C and a room temperature of 20°C (ΔT=50).

# Connection Sets

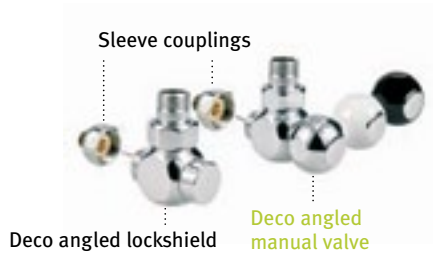
The order code of the connection set will be completed with the sleeve coupling code

## Set 31

For connection to the wall

Two pipe

Code	Thermostatic head
CODE.MW2.MW.1...	white
CODE.MW2.MC.1...	chrome
CODE.MW2.MB.1...	black



## Set 32

For connection to the floor

Two pipe



Code	Thermostatic head
CODE.MF2.MW.1...	white
CODE.MF2.MC.1...	chrome
CODE.MF2.MB.1...	black

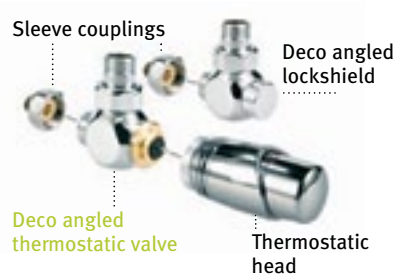


## Set 33 | Set 36

For connection to the wall

Two pipe



33 – Standard Kv	36 – Reduced Kv	
CODE.JW2.DW.1...	CODE.RW2.DW.1...	
CODE.JW2.DC.1...	CODE.RW2.DC.1...	

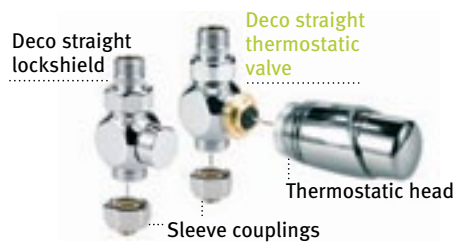


## Set 34 | Set 37

For connection to the floor

Two pipe



34 – Standard Kv	37 – Reduced Kv	
CODE.JF2.DW.1...	CODE.RF2.DW.1...	
CODE.JF2.DC.1...	CODE.RF2.DC.1...	

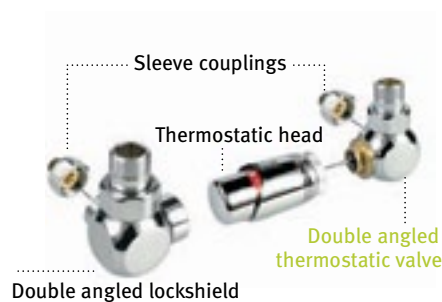


## Set 35 | Set 38

For connection to the wall

Two pipe

35 – Standard Kv	38 – Reduced Kv	
CODE.JH2.DW.1...	CODE.RH2.DW.1...	
CODE.JH2.DC.1...	CODE.RH2.DC.1...	



### Thermostatic heads

DW



Chrome/ White

DC



Chrome



# Connection Sets

The order code of the connection set will be completed with the sleeve coupling code

## Set 81

For connection to the wall

Two pipe



Code	Thermostatic head
CODE.OW2.DW.1...	
CODE.OW2.DC.1...	



## Set 82

For connection to the floor

Two pipe

Code	Thermostatic head
CODE.OF2.DW.1...	
CODE.OF2.DC.1...	

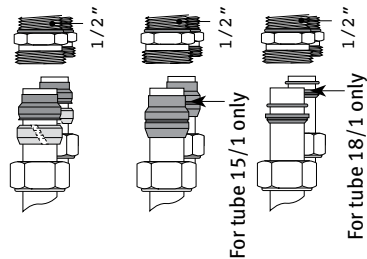


Included in the price of the connection sets

## For Jaga valve - M24

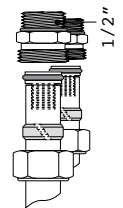
For flexible steel or copper tube

Code	Tube Ø
110	10/1
112	12/1
114	14/1
115	15/1
116	16/1
118	18/1



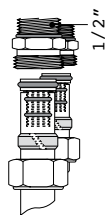
For synthetic tube

Code	Tube Ø
212	12/2
214	14/2
219	16/1.5
216	16/2
217	17/2
218	18/2



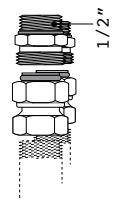
For RPE/ALU tube

Code	Tube Ø
314	14/2
316	16/2
326	16/2.2
318	18/2



Steel tube for CH

Code	Tube Ø
501	1/2"
503	3/8"



Complete ordering code with sleeve couplings according to the material used and diameter of the tube. *The correct type of sleeve coupling is determined by the ordering code of the connection set* Example: CODE. JF2.DW. 1. (insert relevant code from above)

## Correction factors

### Average correction factors according to EN442 - 75/65/20°C

TV	TL	TR_20	25	30	35	40	45	50	55	60	65	70	75	80	85
90	20	0.63	0.69	0.75	0.81	0.87	0.94	1.00	1.07	1.13	1.20	1.27	1.34	1.41	1.48
	24	0.54	0.59	0.65	0.71	0.77	0.83	0.90	0.96	1.03	1.09	1.16	1.23	1.29	1.36
85	20	0.57	0.63	0.69	0.75	0.81	0.87	0.94	1.00	1.07	1.13	1.20	1.27	1.314	
	24	0.48	0.54	0.59	0.65	0.71	0.77	0.83	0.90	0.96	1.03	1.09	1.16	1.23	
80	20	0.51	0.57	0.63	0.69	0.75	0.81	0.87	0.94	1.00	1.07	1.13	1.20		
	24	0.43	0.48	0.54	0.59	0.65	0.71	0.77	0.83	0.90	0.96	1.03	1.09		
75	20	0.46	0.51	0.57	0.63	0.69	0.75	0.81	0.87	0.94	1.00	1.07			
	24	0.37	0.43	0.48	0.54	0.59	0.65	0.71	0.77	0.83	0.90	0.96			
70	20	0.41	0.46	0.51	0.57	0.63	0.69	0.75	0.81	0.87	0.94				
	24	0.32	0.37	0.43	0.48	0.54	0.59	0.65	0.71	0.77	0.83				
65	20	0.35	0.41	0.46	0.51	0.57	0.63	0.69	0.75	0.81					
	24	0.27	0.32	0.37	0.43	0.48	0.54	0.59	0.65	0.71					
60	20	0.30	0.35	0.41	0.46	0.51	0.57	0.63	0.69						
	24	0.23	0.27	0.32	0.37	0.43	0.48	0.54	0.59						
55	20	0.26	0.30	0.35	0.41	0.46	0.51	0.57							
	24	0.18	0.23	0.27	0.32	0.37	0.43	0.48							
50	20	0.21	0.26	0.30	0.35	0.41	0.46								
	24	0.14	0.18	0.23	0.27	0.32	0.37								
45	20	0.16	0.21	0.26	0.30	0.35									
	24	0.13	0.17	0.22	0.26	0.31									
40	20	0.10	0.14	0.18	0.23	0.27									
	24	0.12	0.16	0.21	0.26										
35	20	0.06	0.10	0.14	0.18										
	24	0.08	0.12	0.16											
30	20	0.03	0.06	0.10											
	24	0.05	0.08												

The indicated outputs with  $\Delta T$  50°C and  $\Delta T$  30°C are the exact outputs.  $\Delta T$  50°C outputs are measured in accordance with EN442 and  $\Delta T$  30°C outputs are calculated according to EN442.

An average correction factor is given in this table for outputs at other  $\Delta T$  and is applicable for all dimensions.

## How to choose the right radiator?

### Rapid estimation of heat losses

Calculate the volume of the room (L x W x H) and multiply this by the Watts/m<sup>3</sup> figure given in the table below. Choose according to the level of insulation and the desired room temperature.

Insulation	20°	24°
excellent	45	55
good	65	75
average	85	95
poor	100	115

Required output in Watts/m<sup>3</sup>

### Example

Use the table to determine the relevant correction factor with a water temperature of 80/60°C with a room temperature of 24°C.

The correction factor = 0.90

Required output 1000 watts : 1000 divided by 0.90 = 1111 watts therefore search in this leaflet's standard output table for a product with an output of at least 1111 watts. Alternatively use the "Radiator Finder" search function on [www.jaga.co.uk](http://www.jaga.co.uk) to identify all Jaga heating products with this required output.

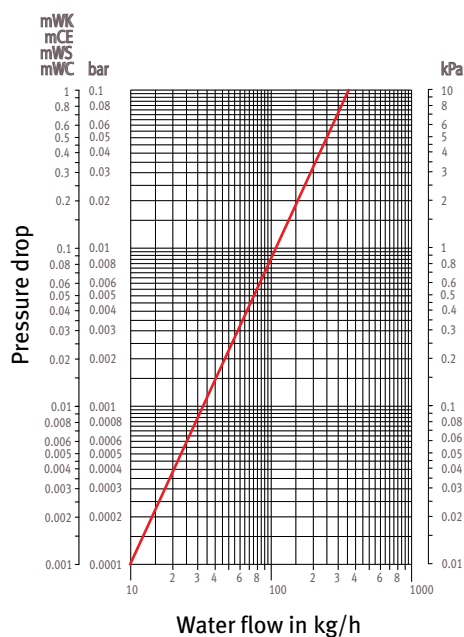
**KEY**  
 Tv = flow temperature  
 Tr = return temperature  
 Tl = desired air temperature



Output calculated in accordance with EN442, at a water temperature of 75/65°C and a room temperature of 20°C ( $\Delta T=50$ ).



## Pressure drop



## Weight & water content

### Weight in kg/cm

H	Single	Double
280	0.08	0.14
340	0.09	0.18
400	0.11	0.21
470	0.13	0.25
530	0.15	0.28
590	0.17	0.31
660	0.18	0.35
720	0.20	0.38
780	0.22	0.42
840	0.24	0.45
910	0.26	0.49
970	0.27	0.52

### Water content in litres/cm

H	Single	Double
280	0.021	0.042
340	0.027	0.053
400	0.032	0.063
470	0.037	0.073
530	0.042	0.083
590	0.047	0.094
660	0.053	0.104
720	0.058	0.114
780	0.063	0.125
840	0.068	0.135
910	0.073	0.145
970	0.079	0.155

## Product description

### Deco Panel Horizontal

#### Material

Composed of single or double steel collectors which support the steel radiation tubes.

The radiation tubes are welded on the inside of the collector under the protection of gas, and with steel as a sole addition. Therefore no welding seams are visible on the outside of the radiator.

Pressure test: 6 bar

Working pressure: 4.6 bar

#### Composition

The oval radiation tubes (60 x 10.4 x 1.5mm) are horizontally and lengthways placed on the vertical collector with an interdistance of 3mm.

Single collector : 50 x 30 x 3mm

Double collector: 90 x 30 x 3mm

Transparency: none

All fixing points are welding to the radiator. The supports to fit the wall are supplied with the standard delivery.

#### Finish

The radiators are sandblasted, degreased, phosphated, electrostatically lacquered with epoxy-polyester powder and finally stove enameled at 200°C. This high quality finish offers an optimal scratch resistance and is very easy to maintain.

Thickness of the lacquer: min 80 µ

#### Connections

The sockets 1/2" are integrated in the collectors and hence invisible. The sockets 1/2" at the top end and bottom end of the collectors stick out 3 mm above the collector. The connections may be ordered at customer choice at top, bottom or at the side end of the radiator. Provided with a chrome plated air vent 1/2" and drain plug 1/2"

#### How to install

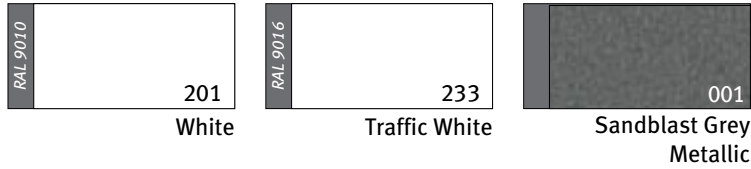
The building services engineer chooses the radiators considering the following conditions:

- A heat output calculation according to the standard.
- The heat output and the dimensions of the Deco Linea radiators according to EN 442.
- The radiators may be wall fitted with the wall fixings supplied, positioned perpendicular to the wall with 2 side end fixings left and 1 foot right or positioned perpendicular to the wall with 2 side end fixings right and 1 foot left.
- The specially designed thermostatic connection sets/ thermostatic Jaga Deco/ Deco Pro single point/ manual Jaga Deco valves can be connected to plastic central heating service pipes/ RPE/ALU. Tube / copper tube/ steel pipe.
- Jaga thermostatic heads/ Jaga Deco thermostatic heads chrome/ White/ Jaga Comap thermostatic heads silver/not to be fitted.

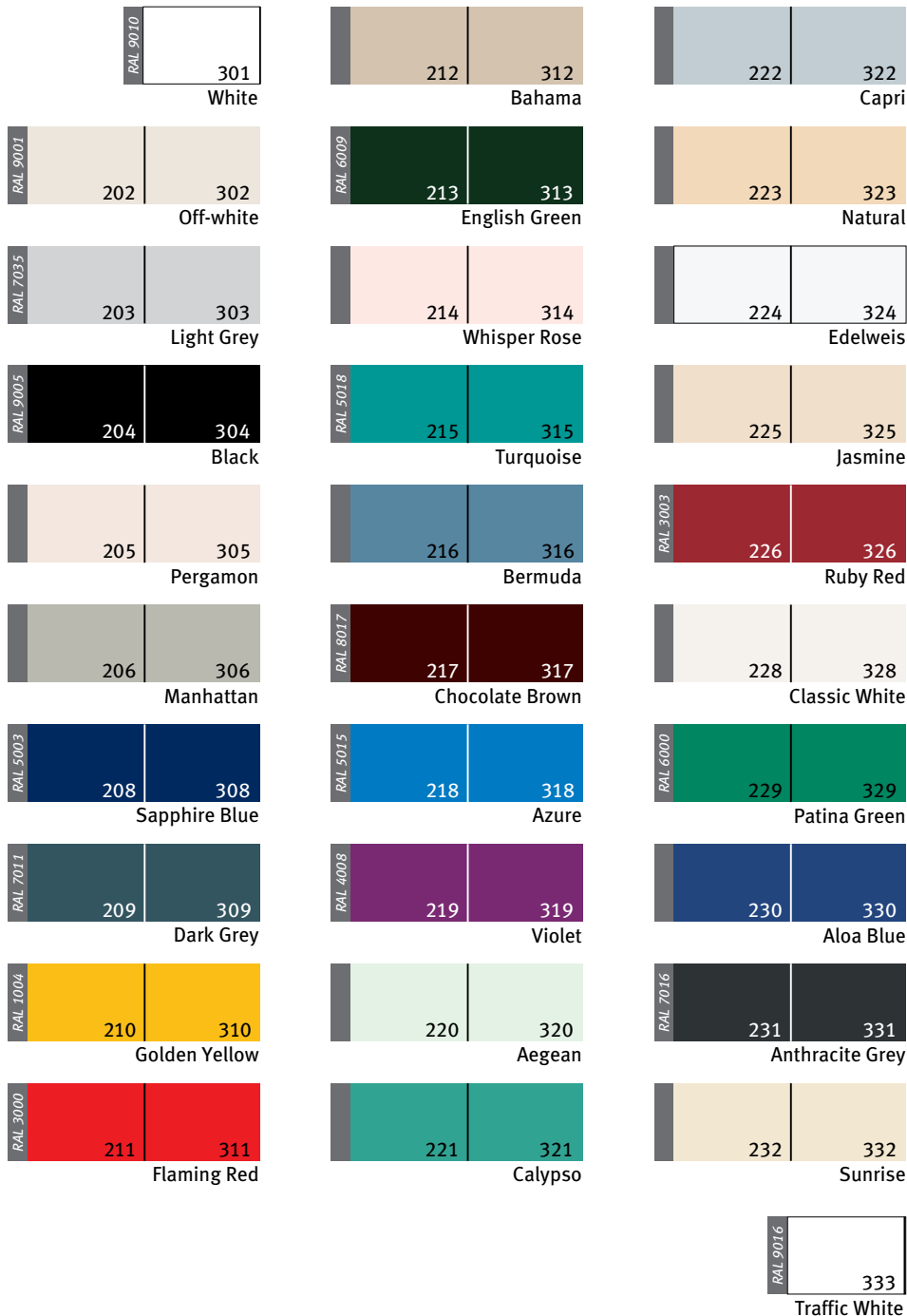
# Jaga colours

## For Deco Panel Horizontal

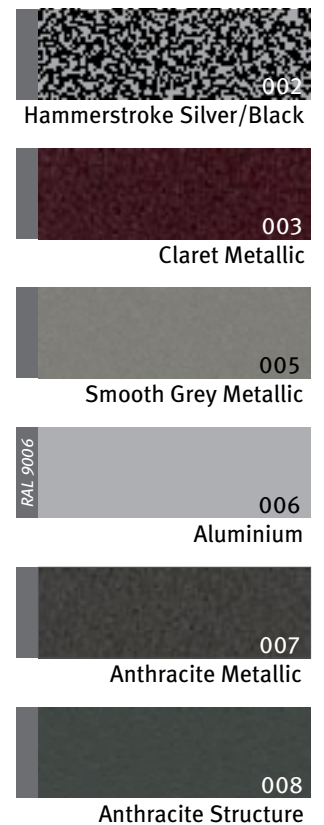
### Standard colours



### Premium colours



### Special colours



As it's impossible to reproduce colours with 100% accuracy, this colour chart is intended as a guide only. Colour swatches are available on request.

# Jaga Guarantee Information

- 1** The guarantee is valid only if the equipment is properly and correctly used, by its first owner and if installed in accordance with the norms and instructions as detailed in the instruction leaflet and current industry standard practices.
- 2** The guarantee only applies to the equipment and the spare parts supplied by Jaga. Jaga has the choice between repair and replacement of the equipment or the spare parts. If any modifications have been made by Jaga to the standard product design, Jaga reserves the right to replace the guaranteed equipment with equivalent products or spare parts.
- 3** The period of guarantee is mentioned in this certificate. The guarantee decreases every year on a straight line basis by an equal percentage in order to reach a zero guarantee at the end of the guarantee period (e.g. for a period of 10 years the annual decrease of the guarantees 10% of the invoiced value). Repaired or replaced product is guaranteed through to the end of the original guarantee period.
- 4** The guarantee is valid only on products displaying the appropriate identification information concerning product type and series. No guarantee is granted on equipment or spare parts lacking this information, on equipment where this information has been removed or altered, or on equipment that has been repaired or modified by persons not authorised by Jaga to carry out this work.
- 5** The customer is responsible for any damage caused as a result of errors in installation or use of incorrect fittings, or for any damage caused by electrical connections, faulty or damaged electrical installations or appliances, erroneous voltage or hydraulic pressure and all other errors not directly related to the product delivered by Jaga. The guarantee is also revoked when unsuitable parts or components are used. The guarantee for our heat exchangers is not valid if they are regularly drained, or if they are heated by means of industrial water, steam or water saturated by excessive quantities of oxygen. The quality of the system after has to be in accordance with the VDI 2035-2 directives. The guarantee is also not applicable if the heat exchangers are placed in unsuitable atmospheric surroundings, such as but not exclusively ammonia, caustic substances etc.
- 6** This guarantee excludes damage due to incorrect handling and/or use of the equipment, or due to formation of lime deposits, incorrect use of the safety valve, or to all equipment that is incorporated into the building in a way that means it cannot be accessed normally.
- 7** Any work undertaken or product supplied as a result of a guarantee claim that proves not to be valid will be charged for. Product supplied will be invoiced at the customer's standard purchasing terms, and labour will be charged at £50 per hour with a minimum labour charge of £200.
- 8** The guarantee period starts from the date of the invoice for supply of the products covered by the guarantee. If the invoice is not available, the date of production will be used based on the product ID number/series.
- 9** Only the courts of judicial district Hasselt (Belgium) are authorised to deal with disputes arising from this guarantee. It will apply Belgian law even when sales involved are subjects of EU member states as well as non-EU member countries.

Casings and components

GUARANTEE  
**10**  
YEAR

Valves

GUARANTEE  
**3**  
YEAR