

# Maximum allowed size of embroidery and transfer on Fristads' flame-protected high-visibility garments.

Garments that are certified according to class 3 can be combined with any other garment, as long as these do not cover the high-visibility garment's fluorescent or reflective areas.

On garments personalised with company logos, it is important to ensure that the logo does not obscure too great a proportion of the fluorescent area. This table will help you determine how large your logo can be. The total fluorescent area must be at least 0.8 m<sup>2</sup> to conform with class 3.

Note! Articles marked with \* can only have logos placed on contrast colour areas, not on fluorescent areas.

## Minimum area in m<sup>2</sup> to obtain approval according to EN ISO 20471

MATERIAL	CLASS 3	CLASS 2	CLASS 1
Fluorescent	0.8	0.5	0.14
Reflective	0.2	0.13	0.1



**EN ISO 20471**  
EN ISO 20471 is a standard for high-visibility garments.

EN 20471

ART. NO	SIZE	EN ISO 20471 HI-VIS CLASS	REFLEC-TIVE AREA/M <sup>2</sup>	FLUO-RESCENT AREA/M <sup>2</sup>	HI-VIS CO-CERTI-FICATION	MAX AREA CM <sup>2</sup> FOR TRANSFER	MAX AREA CM <sup>2</sup> FOR EMBROIDERY
101038	≥XS	3	0.2	0.99	U6	10 cm <sup>2</sup>	Not possible
101056	≥XS	2	0.13	1.17	T6	10 cm <sup>2</sup>	Not possible
109417*	≥C44	1	0.1	0.14	T1	435 cm <sup>2</sup> *	40 cm <sup>2</sup> *
109419	≥C44	2	0.13	0.7	T4	435 cm <sup>2</sup>	40 cm <sup>2</sup>
109420	≥C44	2	0.13	0.69	T4	435 cm <sup>2</sup>	40 cm <sup>2</sup>
109423	≥XS	3	0.2	0.81	U6	100 cm <sup>2</sup>	40 cm <sup>2</sup>
109424	≥XS	2	0.14	0.65	T4	435 cm <sup>2</sup>	40 cm <sup>2</sup>
109428	XS	2	0.19	0.69	U6	435 cm <sup>2</sup>	40 cm <sup>2</sup>
109428	S	2	0.21	0.75	U6	435 cm <sup>2</sup>	40 cm <sup>2</sup>
109428	≥M	3	0.22	0.85	U6	435 cm <sup>2</sup>	40 cm <sup>2</sup>
110642	≥XS	2	0.13	0.53	W1	300 cm <sup>2</sup>	40 cm <sup>2</sup>
111619*	≥C44	1	0.1	0.14	T1	435 cm <sup>2</sup> *	40 cm <sup>2</sup> *
119922	XS	2	0.18	0.77	U6	435 cm <sup>2</sup>	40 cm <sup>2</sup>
119922	≥S	3	0.2	0.86	U6	435 cm <sup>2</sup>	40 cm <sup>2</sup>
119923	XS	2	0.19	0.78	U6	435 cm <sup>2</sup>	40 cm <sup>2</sup>
119923	≥S	3	0.2	0.85	U6	435 cm <sup>2</sup>	40 cm <sup>2</sup>
120929	XS-S	1	0.18	0.43	U3	435 cm <sup>2</sup>	40 cm <sup>2</sup>
120929	≥M	2	0.2	0.55	U3	435 cm <sup>2</sup>	40 cm <sup>2</sup>
121355*	≥C44	1	0.1	0.14	T1	435 cm <sup>2</sup> *	40 cm <sup>2</sup> *
122195	XS-M	2	0.17	0.74	U6	435 cm <sup>2</sup>	40 cm <sup>2</sup>
122195	≥L	3	0.21	0.84	U6	400 cm <sup>2</sup>	40 cm <sup>2</sup>
122196	≥C34	2	0.13	0.54	T3	400 cm <sup>2</sup>	40 cm <sup>2</sup>
122197	≥C34	1	0.1	0.21	T2	435 cm <sup>2</sup>	40 cm <sup>2</sup>
122233	XS	2	0.17	0.79	U6	435 cm <sup>2</sup>	40 cm <sup>2</sup>
122233	≥S	3	0.22	0.88	U6	435 cm <sup>2</sup>	40 cm <sup>2</sup>
124178	≥XS	3	0.2	0.86	U6	435 cm <sup>2</sup>	40 cm <sup>2</sup>
124295	≥XXS/XS	3	0.22	0.8	U6	Not possible	Not possible
124309	≥XS	1	0.2	0.42	U3	435 cm <sup>2</sup>	40 cm <sup>2</sup>
125041	XS	2	0.19	0.67	U6	250 cm <sup>2</sup>	40 cm <sup>2</sup>
125041	S	2	0.2	0.74	U6	250 cm <sup>2</sup>	40 cm <sup>2</sup>
125041	≥M	3	0.21	0.8	U6	Not possible	Not possible
125617	XS	2	0.21	0.73	U6	448 cm <sup>2</sup>	Not possible
125617	S	2	0.22	0.79	U6	448 cm <sup>2</sup>	Not possible
125617	≥M	3	0.21	0.86	U6	448 cm <sup>2</sup>	Not possible
125618	≥XS	2	0.13	0.58	T3	448 cm <sup>2</sup>	Not possible
125893*	≥XS	3	0.28	0.8	-	435 cm <sup>2</sup> *	40 cm <sup>2</sup> *
125938	XS	2	0.18	0.66	U6	250 cm <sup>2</sup>	40 cm <sup>2</sup>
125938	S	2	0.2	0.75	U6	250 cm <sup>2</sup>	40 cm <sup>2</sup>
125938	≥M	3	0.21	0.83	U6	250 cm <sup>2</sup>	40 cm <sup>2</sup>
125939	≥C44	2	0.13	0.57	T3	250 cm <sup>2</sup>	40 cm <sup>2</sup>
125940	≥C44	2	0.13	0.54	T3	250 cm <sup>2</sup>	40 cm <sup>2</sup>
125941	≥C44	1	0.11	0.17	T1	250 cm <sup>2</sup>	40 cm <sup>2</sup>
125942	≥C44	1	0.11	0.17	T1	250 cm <sup>2</sup>	40 cm <sup>2</sup>
125943	≥C44	2	0.13	0.54	T3	250 cm <sup>2</sup>	40 cm <sup>2</sup>
125944	XS-S	2	0.19	0.74	U6	250 cm <sup>2</sup>	40 cm <sup>2</sup>
125944*	≥M	3	0.2	0.88	U6	250 cm <sup>2</sup> *	40 cm <sup>2</sup> *
125945	≥XS	2	0.14	0.58	T3	250 cm <sup>2</sup>	40 cm <sup>2</sup>
125947*	≥XS	3	0.21	0.8	U6	250 cm <sup>2</sup> *	40 cm <sup>2</sup> *
125948	≥S	3	0.3	0.86	-	250 cm <sup>2</sup>	40 cm <sup>2</sup>

ART. NO	SIZE	EN ISO 20471 HI-VIS CLASS	REFLEC-TIVE AREA/M <sup>2</sup>	FLUO-RESCENT AREA/M <sup>2</sup>	HI-VIS CO-CERTI-FICATION	MAX AREA CM <sup>2</sup> FOR TRANSFER	MAX AREA CM <sup>2</sup> FOR EMBROIDERY
125949	≥S	3	0.28	0.83	-	250 cm <sup>2</sup>	40 cm <sup>2</sup>
125950	≥C34	2	0.13	0.52	T3	200 cm <sup>2</sup>	40 cm <sup>2</sup>
125951	≥C34	1	0.1	0.15	T1	100 cm <sup>2</sup>	40 cm <sup>2</sup>
125952	XS-M	2	0.16	0.63	U5	250 cm <sup>2</sup>	40 cm <sup>2</sup>
125952*	≥L	3	0.21	0.8	U5	250 cm <sup>2</sup> *	40 cm <sup>2</sup> *
126510	≥C44	2	0.13	0.57	T3	250 cm <sup>2</sup>	40 cm <sup>2</sup>
126518	≥C34	1	0.1	0.21	T2	435 cm <sup>2</sup>	40 cm <sup>2</sup>
127669	XS-S	2	0.15	0.65	U5	435 cm <sup>2</sup>	40 cm <sup>2</sup>
127669	≥M	3	0.21	0.81	U5	100 cm <sup>2</sup>	40 cm <sup>2</sup>
129517	≥C44	2	0.13	0.55	T3	435 cm <sup>2</sup>	40 cm <sup>2</sup>
129518	≥C44	1	0.1	0.15	T1	100 cm <sup>2</sup>	40 cm <sup>2</sup>
129519	≥C44	1	0.11	0.15	T1	100 cm <sup>2</sup>	40 cm <sup>2</sup>
129520	≥C44	2	0.13	0.54	T3	435 cm <sup>2</sup>	40 cm <sup>2</sup>
129521	≥C34	1	0.1	0.15	T1	100 cm <sup>2</sup>	40 cm <sup>2</sup>
129522	S	2	0.18	0.63	U5	250 cm <sup>2</sup>	40 cm <sup>2</sup>
129522	M	2	0.19	0.71	U5	250 cm <sup>2</sup>	40 cm <sup>2</sup>
129522	L	2	0.21	0.79	U5	250 cm <sup>2</sup>	40 cm <sup>2</sup>
129522	≥XL	3	0.22	0.88	U5	250 cm <sup>2</sup>	40 cm <sup>2</sup>
129548	XS	2	0.18	0.74	U6	435 cm <sup>2</sup>	40 cm <sup>2</sup>
129548	S	2	0.19	0.79	U6	435 cm <sup>2</sup>	40 cm <sup>2</sup>
129548	M	3	0.2	0.86	U6	435 cm <sup>2</sup>	40 cm <sup>2</sup>
129548	≥L	3	0.22	0.93	U6	435 cm <sup>2</sup>	40 cm <sup>2</sup>
129742	XS	2	0.17	0.72	U6	448 cm <sup>2</sup>	Not possible
129742	S	2	0.18	0.76	U6	448 cm <sup>2</sup>	Not possible
129742	≥M	3	0.20	0.82	U6	200 cm <sup>2</sup>	Not possible
129869	XS-S	2	0.18	0.75	U6	340 cm <sup>2</sup>	40 cm <sup>2</sup>
129869	≥M	3	0.21	0.88	U6	340 cm <sup>2</sup>	40 cm <sup>2</sup>
129870	≥XS	2	0.13	0.58	T3	340 cm <sup>2</sup>	40 cm <sup>2</sup>
130238	XS-S	2	0.14	0.66	U6	435 cm <sup>2</sup>	40 cm <sup>2</sup>
130238	M	2	0.20	0.80	U6	435 cm <sup>2</sup>	40 cm <sup>2</sup>
130238	≥L	3	0.21	0.87	U6	435 cm <sup>2</sup>	40 cm <sup>2</sup>
130666	≥XS	1	0.23	0.29	n/a	435 cm <sup>2</sup>	40 cm <sup>2</sup>
131146	S-L	2	0.17	0.67	U6	340 cm <sup>2</sup>	40 cm <sup>2</sup>
131146	≥XL	3	0.21	0.83	U6	300 cm <sup>2</sup>	40 cm <sup>2</sup>
131147	XS-S	2	0.18	0.7	U6	340 cm <sup>2</sup>	40 cm <sup>2</sup>
131147	≥M	3	0.2	0.84	U6	340 cm <sup>2</sup>	40 cm <sup>2</sup>
133268	≥XS	1	0.14	0.3	U2	340 cm <sup>2</sup>	40 cm <sup>2</sup>
133269	≥S	1	0.14	0.31	U2	340 cm <sup>2</sup>	40 cm <sup>2</sup>
134415	≥XS	2	0.13	0.52	T3	200 cm <sup>2</sup>	40 cm <sup>2</sup>
134416	XS-S	2	0.22	0.80	U6	435 cm <sup>2</sup>	40 cm <sup>2</sup>
134416	≥M	3	0.20	0.82	U6	200 cm <sup>2</sup>	40 cm <sup>2</sup>

\* Logo placement only possible on contrast colour area, not on fluorescent area.

### Approved transfers and embroidery

Profiling of flame-retardant Fristads garments must be in accordance with approved transfers and embroidery thread available within Fristads.

Fristads only uses transfers and embroidery that are approved together with our flame-retardant garments.

# Maximum allowed size of embroidery and transfer on Fristads' flame-protected garments.

Non high-visibility garments.

Profiling of flame-retardant Fristads garments must be in accordance with approved transfers and embroidery thread available within Fristads. Fristads only uses transfers and embroidery that are approved together with our flame-retardant garments.

Separate table is available for our high visibility garments.

ART.NO	MAX AREA CM² FOR TRANSFER	MAX AREA CM² FOR EMBROIDERY
100328	250 cm²	40 cm²
100329	250 cm²	40 cm²
100330	250 cm²	40 cm²
100333	250 cm²	40 cm²
100334	250 cm²	40 cm²
100338	250 cm²	40 cm²
100342	250 cm²	40 cm²
100343	250 cm²	40 cm²
100581	250 cm²	40 cm²
109425	435 cm²	40 cm²
109430	435 cm²	40 cm²
110736	250 cm²	40 cm²
111842	250 cm²	40 cm²
114095	435 cm²	40 cm²
119911	435 cm²	40 cm²

ART.NO	MAX AREA CM² FOR TRANSFER	MAX AREA CM² FOR EMBROIDERY
119921	435 cm²	40 cm²
121115	435 cm²	40 cm²
121354	435 cm²	40 cm²
122194	435 cm²	40 cm²
122286	435 cm²	40 cm²
122287	435 cm²	40 cm²
125038	435 cm²	40 cm²
125953	250 cm²	40 cm²
125954	250 cm²	40 cm²
129523	250 cm²	40 cm²
129524	435 cm²	40 cm²
131165	10 cm²	40 cm²
131166	10 cm²	40 cm²
131167	10 cm²	40 cm²
131168	10 cm²	40 cm²