

### Reflecting garments are not just ordinary workwear!

The most important function of reflecting garments is to increase the security for those who work in environments where it is important to be easily spotted. To minimise the risk of accidents is the highest priority, but the garments must also look good and be functional in different working environments. On these pages you can study the complete Björnkläder collection of reflecting garments in several different colour sets - make sure you are seen on the job!



EN 471 Protective clothing with high visibility (Hi-vis clothing) for professional use Certified hi-vis garments are regulated by many requiremens in the norm EN 471. Some are fluorescent and reflective area, luminance and colourfastness. Relatively strict design requirements and placement of reflexes are also regulated. Beside the symbol safety classifications 1-3 is visible regarding area and reflex material, where 3 is the highest security class. Certified garments may be fluorescent yellow, orange or red with regulated luminance, i.e visibility. Important fabric values are colourfastness and damp resistance for coated fabrics.

### Minimum area requirement for EN 471 certification

Material Reflecting material / fluorescent area

Combined background/reflex

Class 1 Class 2 0,14 m<sup>2</sup> 0,10 m<sup>2</sup>

0,20 m<sup>2</sup>

0,50 m<sup>2</sup> 0,13 m<sup>2</sup>

Class 3 0,80 m<sup>2</sup> 0,20 m<sup>2</sup>

### Are you required to always wear class 3?

Then note that 1 + 2 is not always equal to 3. Check the garment table to ensure that your favourite garment combination fulfills your requirements. Note that it is the fluorescent area that determines what protection you have. If you for example wear an ordinary coat covering parts of the fluorescent areas on your trousers, the level of protection decreases. If you have decals on your garments, note that they may affect the fluorescent area. If you put the decal on a non-fluorescent area, it of course does not effect the requirement fulfilment.

#### Remember to:

- \* Keep your garments clean you are easier seen and look better!
- \* Wash your reflecting garments separately or with other reflecting garments of similar colours. Follow the washing instructions placed on the garments. Avoid bleach. Close zippers and wash inside out.
- \* If the garment needs repairing use only materials, which at least fulfill the same standard as the garment.



## Information about hi-vis garments

Туре	Ordernumber	Class	Smallest size	Background material measured area	Reflex measured area	Decal size 5x30cm = 0.015
Jacket hi-vis/flame	771 80 11	3	S	0,87	0,21	0,07
Tool trousers h-v/f	203 70 8011	2	46	0,51	0,14	0,01
Vestdungarees h-v/flame		3	46	0,82	0,21	0,02
Parka winter h-v/f	743 80 11	3	S	1,14	0,22	0,34
Trousers winter h-v/f	228 80 11	2	S	0,99	0,16	0,49
Tool trousers	258 ON 3511	2	46	0,59	0,14	0,09
	258 0X 3511			,	•	,
	258 0Z 3518					
Trousers	257 ON 3511	2	46	0,52	0,14	0,02
	257 0X 3511					
	257 0Z 3518					
Trousers class 1	663 00 1311	1	46	0,25	0,1	0,11
Bib dungarees	120 ON 3511	2	46	0,84	0,13	0,34
	120 0X 3511					
	120 0Z 3518					
Toolp.trous., high water		2	44	0,55	0,13	0,05
	672 07 3518					
Shorts, hi-vis	031 00 3511	2	44	0,50	0,13	
	031 00 3518					
Shorts,tool pocket h-v	032 00 3511	2	44	0,50	0,13	
	032 00 3518	_				
Jacket hi-vis	782 ON 3511	3	S	0,82	0,2	0,02
	782 0X 3511					
Jacket	782 0Z 3518	2	C	1.07	0.20	0.27
Tool pocket vest	785 00 3511 448 00 3511	3	S M	1,07 0,51	0,20 0,17	0,27 0,013
Sweat shirt	24 11 11	3	S	0,8	0,17	0,005
Sweat still	24 11 18	3	3	0,0	0,2	0,003
Polo shirt	23 12 11	3	M	0,81	0,20	0,007
	23 12 18			S/C .	3,23	3,00.
T-shirt	23 11 11	3	Μ	0,81	0,20	0,007
	23 11 18					
Jacket, Fleece - function	925 07 9711	3	XS	0,87	0,20	0,07
	925 07 9718					
Jacket , function - shell	734 00 6611	3	XS	1,02	0,216	0,22
	734 00 6618					
Jacket , function - parka	735 00 6511	3	XS	1,17	0,23	0,37
	735 00 6518					
Trousers, function	298 00 6611	2	XS	0,89	0,14	0,39
	298 00 6618			0.06	0.04	0.05
Jacket, winter -lumber	798 0N 6511	3	S	0,86	0,21	0,06
	798 0X 6511					
laaliak waxaasahla awa	798 0Z 6518	2	C	4.04	0.22	0.24
Jacket, removable arm  Jacket, no arms = vest	799 0X 6511 799 0X 6511	3	S	1,04 0,56	0,23 0,14	0,24
Jacket, no arms = vest  Jacket , winter- parka	746 0N 6511	3	S	0,96	0,14	016
Jacket, Williel's parka	746 0N 6511	3	3	0,50	0,22	010
	746 0Z 6518					
Trousers, winter	281 0N 6511	2	S	0,65	0,14	0,15
	281 0X 6511					, -
	281 0Z 6518					



#### Toolpocket trousers class 2

Same perfect fit as our successful Jubilee Carpenter trousers. D-rings and smart solutions for your keys. An ID card holder is placed under one of the tool pockets. Ruler pocket and mobile phone pocket are where you need them. Inside kneepockets.

46 - 62, 100 - 120, 146 - 156 EN471-2 Size:

CE:

OrderNo: 2580N3511 Yellow/grey 2580X3511 Yellow/navy

2580Z3518 Orange/black



#### Trousers class 2

Comfortable trousers with extra zipper pocket on the left leg. No knee pad pocket on these trousers!

Size: CE: 46 - 62, 100 - 120, 146 - 156 EN471-2

OrderNo: 2570N3511 Yellow/grey 2570X3511 Yellow/navy 2570Z3518 Orange/black







Use fitting long knee pads order no: 972 290 and 972 292!

#### Fabric description

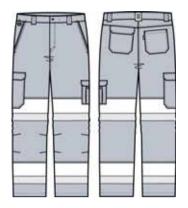
Our hi-vis collection is made of an easy-care material with dirt-repellent abilities. The composition is 80% polyester, 20% cotton with a weight of 250 g/m<sup>2</sup>. Reinforcements of 65% polyester/35% cotton, weight  $300 \text{ g/m}^2$ .

The material is smooth and has a good tearing strength. Good comfort, high strength, low shrinkage are some of the characteristics of this collection.











65% polyester/35% cotton. Inside pockets for knee pads. Navy/yellow.

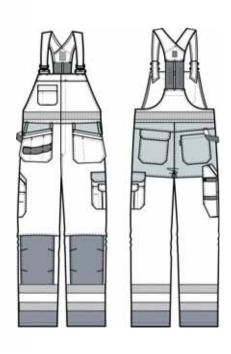
46 - 62, 100 - 120, 146 - 156 EN471-1

OrderNo: 663001311



Use fitting long knee pads order no: 972 290 and 972 292!





#### Bib dungarees class 2

Bibs with tool pockets and inside knee pockets.

Size: CE: 46 - 62, 100 - 120, 148 - 156 EN471-2

OrderNo: 1200N3511 Yellow/grey 1200X3511 Yellow/navy 1200Z3518 Orange/black



### Hi-vis garments





#### Hi-vis jacket, class 3

If you want to be seen, this is the jacket for you, there are reflexes on the shoulders so you will also be seen from above. D-rings and smart solutions to keep your keys where you want them. ID card holder under the right breast pocket.

Size: CE: S - 3XL EN471-3

OrderNo: 7820N3511 Yellow/grey 7820X3511 Yellow/navy 7820Z3518 Orange/black









#### HiVis jacket class 3

If you do not need many pockets. Two side pockets and an inner pocket. You can bring the most important stuff with you.

Size: CE: S - 3XL EN471-3 OrderNo: 785003511

#### Tool pocket vest class 2

Yellow/orange.

M - 2XL EN471-2 Size: CE: OrderNo: 448003511







# Garments with modern solutions!





#### High-Water trousers class 2

Cools you down on hot days! That is the only difference compared with your usual toolpocket trousers. Knee pockets have two heights to fit your knee pads perfectly. Two toolpockets, and under them, side pockets. Ruler and legpocket, two backpockets, one with flap for your wallet. Reinforced with Cordura on stress points. 80% bomull/20% polyester, 250g/m².

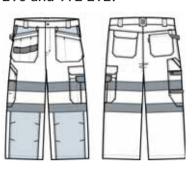
Size: CE:EN471-3 44 - 60

OrderNo: 672073511 Yellow
672073518 Orange

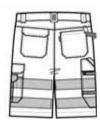
Use fitting long knee pads order no: 972 290 and 972 292!











#### Tool pocket shorts class 2

Same perfect fit as our successful Jubilee Carpenter shorts. Drings and smart solutions for your keys. An ID card holder is placed under one of the tool pockets. Ruler pocket and mobile phone pocket are where you need them.

Size: 44 - 60 CE: EN471-2

OrderNo: 032003511 Yellow 032003518 Orange

#### Fabric description

Our hi-vis collection is made of an easy-care material with dirt-repellent abilities. The composition is 80% polyester, 20% cotton with a weight of 250 g/m². Reinforcements of 65% polyester/35% cotton, weight 300 g/m².

The material is smooth and has a good tearing strength. Good comfort, high strength, low shrinkage are some of the characteristics of this collection.



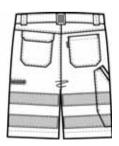
#### Shorts with side pockets class 2

Comfortable HiVis-shorts with a mobile phone pocket, which is placed so that it is never in the way. You can reach your mobile even when you are driving. Extra pocket with zipper on the left leg.

Size: 44 - 60 CE: EN471-2

OrderNo: 031003511 Yellow 031003518 Orange











#### T-shirt

Fabric: 75% polyester/25% viscose.

Weight: 175 g/m². Size: M - 2XL CE: EN471-3

OrderNo: 053079511 Yellow/navy 053079518 Orange/black

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EN 471 class 3

#### Polo shirt

Fabric: 75% polyester/25% viscose. Weight: 175 g/m².

Size: M - 2XL CE: EN471-3

OrderNo: 054079511 Yellow/navy 054079518 Orange/black EN 471

class 3





#### **Sweatshirt**

Fabric: 50% polyester/50% cotton. Weight: 315  $g/m^2$ .

Size: S - 2XL EN471-3 CE:

OrderNo: 055079811 Yellow/navy 055079818 Orange/black

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**EN 471** class 3

Hi-vis vest, class 2

Hi-vis vest, 100% polyester,  $130 \text{ g/m}^2$ . Zipper.

Size: XS - 2XL

OrderNo: 307886 Yellow 307887 Orange

**EN 471** 

class 2

#### Reflecting vest

Yellow/orange. 100% polyester, 130 g/m². Pocket.

Size: M - 2XL OrderNo: 308310





## Wind and water proof fleece jacket!



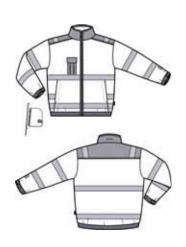
#### Fleece jacket class 3

This is no ordinary fleece jacket. It has not only all the good qualities of the normal fleece, but is also wind and water proof. This is a jacket you can use all year, which can handle a shower and wet snow and still keep you warm and dry. The jacket has two side pockets, one with zipper, a mobile phone pocket and a large inner pocket. 85% cotton/15% polycotton, 325g/m². 5000mm, 2000g/m².

Size: CE: XS - 3XL EN471-3

OrderNo: 925079711 Yellow 925079718 Orange





## Functional garments that breathe!



EN 343 Protective clothing - Protection against foul weather This norm shows that the garment protects against foul weather. It requires tests to be done on fabric and seams. Beside the umbrella symbol, the classification of the garment is given, waterproofness class 1-3 and moisture resistance class 1-3, where 3 is the highest rating. Note that the norm specifies

different time limits on use in different temperatures to avoid overheating.



#### Functional hi-vis shell jacket

Functional wind and waterproof jacket with taped seams. The jacket is breathable and has ventilation under the arms. The side pockets have zippers. One of the pockets has a D-ring for e.g. keys. Removable hood. Inside pocket with zipper and mobile phone pocket and pencil pocket. Material: 100% polyester, 240g. Water gauge: 5000mm. Breathability 5000 g/m²/24h.

XS - 2XL EN471-3. ENV343-3

OrderNo: 734006611 Yellow

734006618 Orange









100% polyester with a PU layer on the inside. Weight 215 g/m<sup>2</sup>. Column of water: 5000 mm. Breathability: 5000 g/m<sup>2</sup>/24h.



#### Functional hi-vis trousers

Functional trousers that keep wind and water away, all seams taped. Side pockets with zipper and flap.
Openable at bottom to fit boots. Snow lock keeps water and snow away. Two back pockets and a leg pocket, all with flaps. Material: 100% polyester, 240g. Water gauge: 5000mm. Breathability 5000 g/m²/24h.

XS - 2XL EN471-2.NV343-3

CE:

OrderNo: 298006611 Yellow

298006618 Orange













#### Winter lined functional parka

Class 3 functional parka, wind and waterproof, lets moisture out. All seams taped. The hood is removable. This is a parka to keep you warm! There are a lot of pockets, including the popular Napoleon pocket. On the inside you find two exta pockets of mesh, which expand when you fill them with for example your gloves. Lined with a quilted lining, light, warm, smooth. 100% polyester, 215g/m². 5000mm, 5000g/m², taped seams taped seams.

Size: CE:

XS - 2XL EN471-3. ENV343-3 OrderNo: 735076611 Yellow 735076618 Orange

### Hi-vis hat

Design and fabrics of the new age. The outer fabric is wind and water proof as well as breathable. The cap has a laminated fleece lining.

Size: M - L

OrderNo: 090076611 Yellow 090076618 Orange



## Winter hi-vis







### Winter jacket class 3

Winter jacket for tough conditions, prolonged back, two-way zipper so you can open the jacket at the bottom if you for example sit inside a car. Fleece lined collar, all outer pockets have zippers.

Size: S - 3XL EN471-3

OrderNo: 7980X6511 Yellow/navy blue 7980N6511 Yellow/grey 7980Z6518 Orange/black

#### Fabric description

Our hi-vis collection is made of an easy-care material with dirt-repellent abilities. The outer fabric is made of 75% polyester and 25% cotton, with a weight of 260 g/m<sup>2</sup>.





**EN 471** class 3

#### Winter parka class 3

Cargo pockets with flap and breast pocket with zipper. The pockets and collar have been lined with fleece. Removable hood can be purchased separately.

S - 3XL EN471-3 Size: CE:

OrderNo: 7460X6511 Yellow/navy blue 7460N6511 Yellow/grey 7460Z6518 Orange/black





Hood that fits the parka. Nice when the wind blows cold and when it rains!

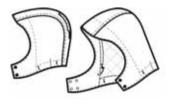
OrderNo: 088006511 Yellow 088006518 Orange Winter hat

Winter hat in polyester/cotton.

M - L Size:

OrderNo: 092176511 Yellow

092176518 Orange









Jacket, class 3. Vest, class 2

Two garments in one. The sleeves have zippers so that you can use the garment as vest. Side pockets and two breast pockets with zipper. Inner pocket and mobile phone pocket. Gul/marin.

S - 3XL EN471-2+3 Size: CE: OrderNo: 7990X6511



#### Winter trousers class 2

Winter trousers with lots of pockets, D-ring for keys. Pre-bend knees for better fit.

Size: CE: S - 3XL EN471-2

OrderNo: 2810X6511 Yellow/navy blue 2810N6511 Yellow/grey 2810Z6518 Orange/black



**EN 471** class 2

