



THE UNITED KINGDOM VEHICLE APPROVAL AUTHORITY

COMMUNICATION CONCERNING THE APPROVAL GRANTED ⁽¹⁾/ ~~APPROVAL EXTENDED ⁽⁴⁾/~~
~~APPROVAL REFUSED ⁽⁴⁾/ APPROVAL WITHDRAWN ⁽⁴⁾/ PRODUCTION DEFINITELY~~
~~DISCONTINUED ⁽⁴⁾~~ OF A COMPONENT TYPE PURSUANT TO REGULATION NO 118.02



Approval No: 118R11-021212

Extension No: Not applicable

Reason for extension: Not applicable


SECTION I

GENERAL

- 1.1. Make (trade name of manufacturer): Camira Transport Fabrics Ltd
- 1.2. Type: Wool Rich Moquette – Wire Woven
- 1.3. Means of identification of type, if marked on the device ^(b): Not applicable
 - 1.3.1. Location of that marking: Not applicable
- 1.4. Name and address of manufacturer:
Camira Transport Fabrics Ltd
Meltham Mills
Meltham
West Yorkshire
HD9 4AY
United Kingdom
- 1.5. Location of the ECE approval mark: Manufacturers label

- 1.6. Address(es) of assembly plant(s):
 UAB Camira Fabrics
 Zemaiciu g 47
 Ariogala
 LT-60252
 Raseiniu raj
 Lithuania

SECTION II

1. Additional information (where applicable): See Appendix
 2. Technical service responsible for carrying out the tests: Vehicle Certification Agency
 3. Date of test report: 28 February 2017
 4. Number of test report: ESS379570
 5. Any remarks: Approval to Supplement 2
 6. Place: BRISTOL
 7. Date: 02 AUGUST 2017
 8. Signature:  D LAWLOR
 Chief Technical and Statutory Operations Officer
 9. The index to the information package lodged with the Type Approval Authority, which may be obtained on request, is attached.
- (1) Strike out what does not apply (there are cases where nothing needs to be deleted, when more than one entry is applicable)
- (b) If the means of identification of type contains characters not relevant to describe the vehicle, component or separate technical unit types covered in this information document, such characters shall be represented in the documentation by the symbol "?" (e.g. ABC??123??)

APPENDIX

to type-approval communication form No. 118RII-021212

concerning the type-approval of a component type pursuant to Regulation No. 118.02

1. Additional information.
 - 1.1. Interior materials: Yes
 - 1.1.1. The direction which the component may be installed: ~~horizontal / vertical~~ / both horizontal and vertical direction(s).⁽¹⁾
 - 1.1.2. Fulfils the requirements in paragraph 6.2.2: yes / ~~not applicable~~⁽¹⁾
 - 1.1.3. Compliance has been checked for components approved as complete devices: ~~yes~~/no⁽¹⁾
 - 1.1.4. Any restrictions of use and installation requirements: Material prohibited from use within the engine compartment and any heating compartments
 - 1.2. Insulation materials: Not applicable
 - 1.2.1. The direction which the component may be installed: horizontal / vertical / both horizontal and vertical direction(s).⁽¹⁾
 - 1.2.2. Compliance has been checked for components approved as complete devices: yes/no⁽¹⁾
 - 1.2.3. Any restrictions of use and installation requirements:
 - 1.3. Electric cables: Not applicable
 - 1.3.1. Any restrictions of use and installation requirements:
2. Remarks: Material approval covers full colour spectrum

VCA Test report Number	Fabric Type	Date created
ESS379570	Wool Rich Moquette - Wire Woven	08/02/2017

camira	Document Number:	PROD - VCA118.02
	Document Owner:	Technical Development
	Document Name:	VCA Information Document
	Issued Date:	22/12/16
	Revision:	NEW
Camira Transport Fabrics Ltd - Information Document		
Fabric Type:	Wool Rich Moquette - Wire Woven	

Document prepared in accordance with paragraph 3.2. of the regulation relating to the type approval of a component used in the interior compartment, the engine compartment and any separate heating compartment with regard to its burning behaviour and/or the capability to repel fuel or lubricant of insulation materials used in the engine compartment and any separate heating compartment

1. General	
1.1 Make (trade name of manufacturer):	
Company Name:	Camira Transport Fabrics Ltd
1.2 Type and general commercial description(s):	
Fabric Type:	Wool Rich Moquette – Wire Woven
Commercial Description:	Wire woven moquette- All cut, cut and loop, all loop
Composition:	Refer to Quality Matrix below
Treatment:	Fire retardant Latex Treatment
Weight:	830 – 1180 gm ⁻²
Fabric Type:	Wool Rich Moquette – Wire Woven + Rucoguard
Commercial Description:	Wire woven moquette- All cut, cut and loop, all loop
Composition:	Refer to Quality Matrix below
Treatment:	Fire retardant Latex Treatment + Rucoguard (high performance repellency system with low effect on flammability).
Weight:	830 – 1180 gm ⁻²
Fabric Type:	Wool Rich Moquette – Wire Woven + Defender
Commercial Description:	Wire woven moquette- All cut, cut and loop, all loop
Composition:	Refer to Quality Matrix below
Treatment:	Fire retardant Latex Treatment + Defender (high performance repellency system with antibacterial and antifungal properties).
Weight:	830 – 1180 gm ⁻²
Quality Matrix	The Quality matrix below gives the trade name and the composition for the wire loom moquettes that are included in the range. These fabrics are woven using wool/nylon pile yarn with cotton and/or polyviscose backing yarns. The pile is created when the jacquard selects the colour of yarn determined by the design and a wire is inserted that will give a loop or cut pile. The fabric can therefore consist of all loop and/or cut pile. Fabric images are shown on page 5.



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Quality Matrix For Wool Rich Moquette – Wire Woven

Trade name	Description	Percentage composition of base fabric					Average weight/ gm ⁻²
		Wool	Nylon	Cotton	Polyester	Viscose	
1001	All loop pile, wire woven moquette, thickness 3.0 - 3.8 mm	54	9	37			850 - 950
745	Combination of cut an uncut pile, wire woven moquette, thickness 3.5 - 4.5 mm	56	10	34			840 - 970
750	All cut pile, wire woven moquette, thickness 3.5 - 4.5 mm	56	10	34			850 - 980
754	Combination of cut an uncut pile, wire woven moquette, thickness 3.5 - 4.5 mm	57	10	33			860 - 990
755	Combination of cut an uncut pile, wire woven moquette, thickness 3.5 - 4.5 mm	57	10	33			840 - 970
172	Combination of cut an uncut pile, wire woven moquette, thickness 3.5 - 4.5 mm	57	10	33			830 - 960
SK33	All cut pile, wire woven moquette, thickness 3.5 - 4.5 mm	57	11	32			850 - 980
Nord	Combination of cut an uncut pile, wire woven moquette, thickness 3.5 - 4.5 mm	62	11	21	4	2	920- 1100
Odin	All cut pile, wire woven moquette, thickness 3.5 - 4.5 mm	62	11	21	4	2	940 - 1180

Base fabric has an additional Fire Retardant latex treatment of 120 - 140 gm⁻²



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1.3 Name and address of manufacturer:

Camira Transport Fabrics Ltd
Meltham Mills
Meltham
West Yorkshire
HD9 4AY

1.4 In the case of components and separate technical units, location and method of affixing of the approval mark:

Label attached to piece

1.5 Address(es) of assembly plant(s):

UAB Camira Fabrics
Zemaiciu g 47
Ariogala
LT-60252
Raseiniu raj
Lithuania

2. Interior materials

2.1 Material(s) intended for ~~horizontal~~ / ~~vertical~~ / horizontal and vertical installation

Material intended to be installed more than 500 mm above the seat cushion and/or in the roof of the vehicle: Yes / ~~not applicable~~

2.2 Base material(s)/designation:

Fabric Type:	Wool Rich Moquette – Wire Woven + Fire retardant latex treatment
Fabric Type + Treatment:	Wool Rich Moquette – Wire Woven + Fire retardant latex treatment + Rucoguard
Fabric Type + Treatment:	Wool Rich Moquette – Wire Woven + Fire retardant latex treatment + Defender

2.3 Composite/single material, number of layers:

Number of Layers:	Single material, single layer
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2.4 Type of coating:

Wool Rich Moquette – Wire Woven + Fire retardant latex treatment	120-140gsm FR coating
Wool Rich Moquette – Wire Woven + Fire retardant latex treatment + Rucoguard	120-140gsm FR coating
Wool Rich Moquette – Wire Woven + Fire retardant latex treatment + Defender	120-140gsm FR coating

Effect on thickness:	Negligible effect on coating
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2.5 Minimum/maximum thickness:		
	Min (mm)	Max (mm)
Wire Woven	3.0	4.5
Wire Woven + Rucoguard	3.0	4.5
Wire Woven + Defender	3.0	4.5
2.6 Type approval number, if available:		

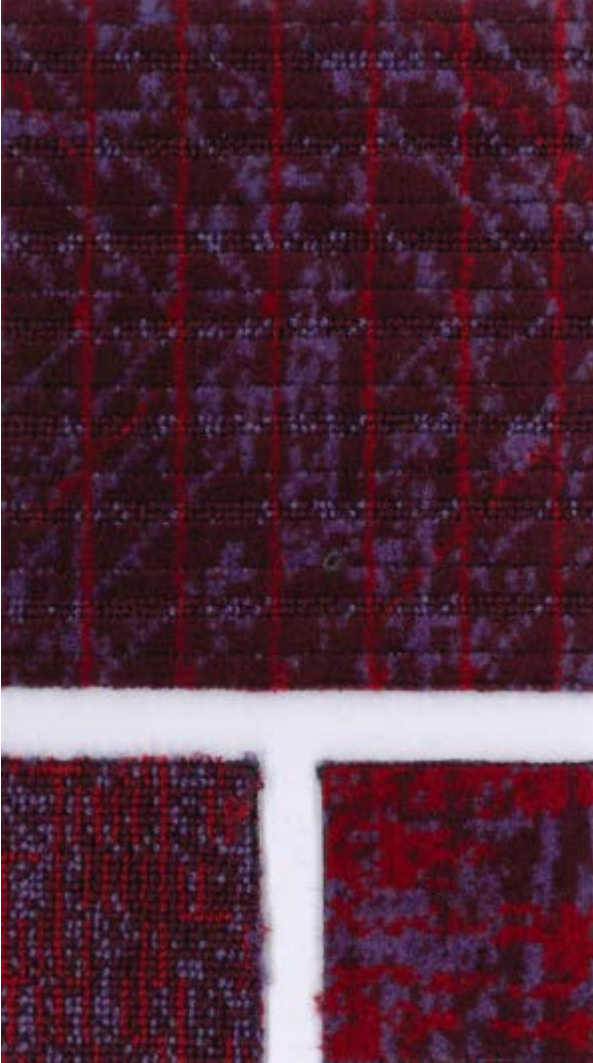
3. Insulation materials
N/A

4. Electric cables
N/A

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Additional information

Brief product description:	Wire woven moquette is a very high wool content fabric construction, which can be made in cut or loop pile or a combination of the two.
Finishing process description:	The finishing process which involves steaming, brushing and cropping also includes the addition of a Fire Retardant Latex treatment enhancing the fabrics flammability properties.
Brief treatment description:	Two separate additional treatments can also be provided:- “Defender” , a high performance repellency system with antibacterial and antifungal properties. “Rucoguard” a high performance repellency system with low effect on flammability. The two additional treatments are added by passing the fabric through a solution of the required chemical followed by drying and curing.
Fabric usage:	Fabric which is provided in roll form to specialist manufacturers, may be cut to shape and used within the automotive industry for Bus and Coach interior trim.

Marketing image:	 <p style="text-align: center;">Cut and loop pile options</p>
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Fabric colours and treatments selected for approval testing are presented below:		
750	1001	Nord + Odin
D7454A	D7454B	D7454C
'Reddest'	'Reddest'	'Reddest'
		D7454C is represented by both all loop and all cut fabrics, using the same design and wire combination as the fabrics D7454A and D7454B which are shown opposite.

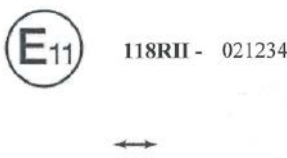
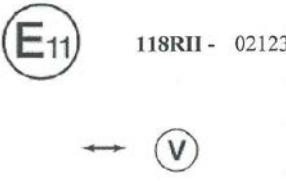
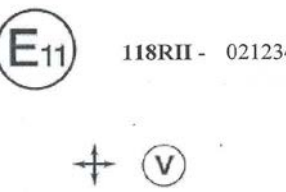
Additional information - Worst case scenario	
Worst case description:	<p>The four designs selected show the extremes of the range of the Wire Woven fabric composition. These are shown in the Quality Matrix on page 2 of the document.</p> <p>D7454B Trade name 1001, all loop.</p> <ul style="list-style-type: none"> 54 % Wool, 9% Nylon, 37% cotton <p>D7454A Trade name 750, all cut.</p> <ul style="list-style-type: none"> 56 % Wool, 10% Nylon, 34% cotton <p>D7454C Trade Name Odin, all cut</p> <ul style="list-style-type: none"> 62% Wool, 11% Nylon, 21% cotton, 4% Polyester, 2% Viscose. <p>D7454C Trade Name Nord, all loop</p> <ul style="list-style-type: none"> 62% Wool, 11% Nylon, 21% cotton, 4% Polyester, 2% Viscose.
Worst case rationale:	<p>The four designs have been selected to represent the extremes of the range. With the loop pile representing fabric which has the least overall wool/nylon content, and the all-cut fabric representing fabric which has the most overall wool/nylon content.</p> <p>The wool/nylon percentage composition is also adjusted in the range as the pile yarn content increases in the fabric from the trade names 1001 and 750 to Nord and Odin.</p> <p>Nord and Odin include the introduction of a small amount of polyester/viscose blend used for strength in the backing warps. The addition of a small percentage of synthetic yarn in the backing warp will not significantly affect the flammability of the fabric.</p> <p>With the increase in pile yarn composition then we can predict that the fabrics with the highest wool content will display the best results in terms of flammability testing, this is due to the fact that wool has the highest LOI (Limiting Oxygen Index) value out of the fibre compositions used above, which means it is less likely to ignite than nylon, cotton, polyester or viscose.</p> <p>Camira Transport Fabrics can also confirm that the all loop fabrics tend to behave worse in fire tests than the all-cut fabrics. This is partially due to the all-cut fabrics having a higher density of wool overall. This has been shown to be the case in testing for rail products.</p> <p>In conclusion, if no design shows a worst case result then the fabric with the trade name 1001 will be selected as the worst case as this has the lowest percentage of wool in the product.</p>



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<p>Additional worst case justification or information:</p>	<p>The colour red and treatment Defender has been selected to be used for this worst case testing for the reasons given below.</p> <p>Camira Transport Fabrics Ltd supply materials with a range of treatments applied. In the material's base form it is supplied with a Fire Retardant Latex Treatment. It may then receive either an additional treatment of Rucoguard or Defender.</p> <p>“Rucoguard” – Is a high performance repellence system with low effect on flammability.</p> <p>“Defender”- Is a high performance repellence system with antibacterial and antifungal properties.</p> <p>Colour Selection</p> <p>Tests were carried out on the Wool Rich Moquette - Vigor range (VCA Test report number ESS377247) to identify the worse performing colour of a Wool Rich Moquette with Fire Retardant Latex Treatment. (Samples of the Darkest, Reddest and Lightest colour were tested). There was no individual worst performing colour, so the Red was selected as the colour to carry out the full test on, due to it having the most pigmentation present in its construction.</p> <p>Treatment Selection</p> <p>Samples of the material of the Wool Rich Moquette - Vigor with “Fire Retardant Treatment” and the additional treatments “Rucoguard” and “Defender” were also tested to identify the worse performing treated version of a Wool Rich Moquette with Fire Retardant Latex Treatment. There was no individual worst performing treatment, so the ‘Defender’ was selected as the treatment to carry out the full test on, due to it having the highest level of chemical addition.</p> <p>We have used the justification above to pre-select the colour and treatment that would be the worst case scenario for testing the Wire Woven fabric. We can also be confident of this selection as the Face to Face and Wire Woven fabrics exhibit similarities in compositional and manufacturing techniques. Historically Wool Rich Moquette was woven on a wire loom until the introduction of double plush looms that allowed the production of face to face fabrics.</p>
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Additional information - Labelling:

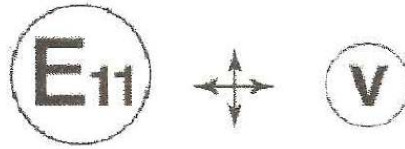
Label description Horizontal only	Label description Horizontal and Melting	Label description Horizontal, Vertical and Melting
		

Example of how label would appear on fabric roll:

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camira

TRACK (Q165)



118RII-021119

Run **311715** Roll **0402**