

WOOD COMPOSITE & ALUMINIUM

GARDEN RANGE





## WHAT IS DUOFUSE®

The extensive garden range includes decking boards in different sizes, colours and designs to give your terrace floor a beautiful appearance and pleasant comfort.

To fence off your garden or terrace, you can choose from different fences, all modular and combinable. The tongue and groove system gives your garden an austere, even look. The slatted fence, on the other hand, is a more modern fence with a pleasant play of lines. The open fence allows you to be closed off and still keep the open feeling. The privacy slats are the aesthetic solution for enjoying your garden in all privacy.

All articles can be combined perfectly as they are produced from the same raw materials and in the same colours.

#### WOOD COMPOSITE

Duofuse® wood composite is a mix of wood flour and PVC. Mixing wood flour and PVC gives rise to an extremely strong combination, which reinforces the advantages of both materials while removing their disadvantages.

This durable material is ecological and maintenance friendly. It is available in a traditional wood colour and in modern shades of grey.

#### **ALUMINIUM**

The garden fences are also available in aluminium. They are the best investment for finishing off your garden to perfection. The combination of timelessness and ease of maintenance are ideal for decades of carefree enjoyment of your garden.

## **ADVANTAGES**

- Easy to install
- Easy to maintain, no more oiling or painting

#### WOOD COMPOSITE

- Will not rot or splinter
- Ecological and recyclable
- Slip resistant, brushed surface
- Minimal discolouration, maintains original look

#### **ALUMINIUM**

- Modern and sleek look
- Light and strong
- Does not rust
- Long service life

## RANGE DUOFUSE®

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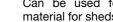


#### VERSATILE AND MODULAR

Heights possible for wood composite from 15 cm to 195 cm & for aluminium 20 cm to 200 cm.

Wood composite boards can be fixed to the composite posts in 4 directions thanks to the U-profiles. Standard length for wood composite is 180/200 cm & for aluminium 200 cm, can be shortened.

material for sheds, carports, cabins, storeroom, gates,...





### TONGUE AND GROOVE BOARD IN WOOD COMPOSITE

#### PARTS COMPOSITE POSTS



DF1B150

Tongue and groove board 15 x 2,7 x 180/200 cm (reinforced with steel)



**DF1P90** 

Post (reinforced with an aluminium core) 9 x 9 x 210/270/300 cm



#### DF1C11

Cover cap CLASSIC 11 x 11 x 1,7 cm (to avoid water infiltration in the post)



#### **DF1C09**

Cover cap DESIGN 9 x 9 x 1,7 cm (to avoid water infiltration in the post)



#### **DF1U27**

Small U-profile 2,7 x 3,5 x 182/202 cm (fitting system for the boards and to use as finishing profile above the upper board)































DF1U42 Large U-profile

4,2 x 3,5 x 182 cm (optional - only needed if a concrete gravel board is used at the base)













Internal post holder tube Aluminium U-profile 6 x 6 x 60 cm on plate 15 x 15 cm (optional - only needed when fixing the posts on a terrace, concrete floor or wall)



#### DF1UA28

2,8 x 3,5 x 180/200 cm







#### DF1SUPA

Aluminium support (to be used in combination with aluminium profile DF1UA28 as underprofile)



## TONGUE AND GROOVE BOARD IN WOOD COMPOSITE

# PARTS ALUMINIUM POSTS



Tongue and groove board 15 x 2,7 x 180/200 cm (reinforced with steel)



Post in aluminium 8,2 x 8,2 x 300 cm



#### DFPHA15

Internal postholder aluminium post lacquer (15cm)









#### DF1CA8.2

DFRT10X6

10 x 6 mm

Cellular rubber strip

RAL 7030 RAL 7021

Cover cap DF1PA82 8,2 x 8,2 x 2,8 cm (synthetic black)

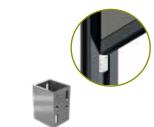


#### DF1PA41

Aluminium post hingeable 8,2 x 8,2 x 300 cm







#### DF1UA28

Aluminium U-profile 2,8 x 3,5 x 180/200 cm



RAL 7030 RAL 7021



#### DF1SUPA

DF1CA4.1

Cover cap DF1PA41

8,2 x 9 x 2,8 cm

(synthetic black)

Aluminium support (to be used in combination with aluminium profile DF1UA28 as underprofile)

#### TONGUE AND GROOVE BOARD IN ALUMINIUM

### PARTS ALUMINIUM POSTS



#### DF5BA200

Tongue and groove board in aluminium 20 x 2,8 x 200 cm



#### DF1PA82

SG

Aluminium post 8,2 x 8,2 x 300 cm

RAL 7030 RAL 7021



#### DF1CA8.2

Cover cap DF1PA82 8,2 x 8,2 x 2,8 cm (synthetic black)



#### DF1PA41

Aluminium post hingeable 8,2 x 8,2 x 300 cm



#### DF1CA4.1

Cover cap DF1PA41 8,2 x 9 x 2,8 cm (synthetic black)



GB RAL 7030 RAL 7021



#### DF1UA42

Aluminium U-profile 4,2 x 220 cm (for aluminium post & for concrete base plate)





SG lacquer lacquer RAL 7030 RAL 7021

#### DFPHA15

Internal postholder aluminiumpaal lacquer (15cm)





RAL 7030 RAL 7021



#### DF1UA28

Aluminium U-profile 2.8 x 3.5 x 180/200 cm





RAL 7030 RAL 7021



Aluminium support



#### **DF1SUPA**

(to be used in combination with aluminium profile DF1UA28 as underprofile)



Garden fences in wood composite/aluminium tongue and groove boards are the durable and modular alternative to hardwood garden fences. They fit every architectural style thanks to their timeless plank structure.

The Duofuse® tongue and groove boards are part of a complete system with all necessary fittings and accessories. Besides the planks and posts, Duofuse® also offers cover caps, small and large U-profiles, internal post holders and gate

The posts are available in wood composite and also in aluminium for customers who want a more modern look.

The handy tongue and groove boards also allows for garden gates, as well as the construction of flowerbeds and containers, a terrace fence or the construction of a wood composite garden house, carport,... Convenient, lasting and

# TIMELESS AND ATTRACTIVE



#### GATE IN WOOD COMPOSITE

#### DF1G2-1.00

Gate in wood composite 100 x 2,7 x 180 cm 100 x 2,7 x 200 cm (including door hardware) (reinforced with steel























#### DF1C09

Composite cover cap DESIGN L 90 m W 90 mm



















#### DF1PG2-90

Composite gate post H 3 m W 90 mm profile)



DF1C11

CLASSIC

L 110 mm

W 110 mm



Composite cover cap



Aluminium gate post H 3 m W 82 mm

DF1PAG2-82

SG

lacquer lacquer RAL 7030 RAL 7021



#### DF1CAG2-8.2

Cover cap DF1PAG2-82 L 148 mm W 82 mm (synthetic black)



#### 1 kit includes:

- Integrated cylinder lock in stainless steel including 2 keys
- Gate catcher in stainless steel including: material for installation on WPC gate post material for installation on aluminium gate post
- Hinges in stainless steel including: material for installation on WPC gate post material for installation on aluminium gate post
- Modern door handle in alunminium
- Lock plates in stainless steel

# **GATE IN ALUMINIUM**





#### DF5GA1.00

Gate in aluminium 100 x 2,8 x 180 cm 100 x 2,8 x 200 cm (including door hardware)



SG GB RAL 7030 RAL 7021



#### DF1PAG2-82 Aluminium gate post

Cover cap DF1PAG2-82 L 148 mm H 3 m W 82 mm W 82 mm (synthetic black)

DF1CAG2-8.2

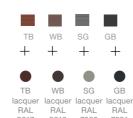


The Duofuse® tongue and groove plank system also includes gates and gate posts in the same design. Very practical and perfectly integrated in the wood composite and aluminium fence. Unlike wooden gates, they require almost no maintenance.

## OPTIONAL: DECOPANEL



Kit deco square in lacquered aluminium 30 x 0,6 x 200 cm





#### DF1AB

Kit deco bubbles lacquered aluminium 30 x 0,6 x 200 cm





#### DF1PT

Kit deco transparent PMMA 30 x 0,6 x 200 cm





DF1PO

Kit deco matt PMMA 30 x 0,6 x 200 cm



1 kit includes

tongue profile - 1x 2m (upper finish) groove profile - 1x 2m (bottom finish)

groove profile - 1x 0,60m (side finish)

rubber profile - 2x 2m rubber profile - 1x 0.6m 1 deco panel

Installation guide





## 1 kit includes:

- Integrated cylinder lock in stainless steel including 2 keys
- material for installation on aluminium gate post Hinges in black lacquered aluminium including: material for mounting on aluminium gate post

• Gate catcher in stainless steel including:

- Modern door handle in black lacquered aluminium
- Lock plates in black pvc





U-profile for slat wall system 4 x 5,5 x 202 cm (fitting system for the boards and to use as finishing profile above the upper board)



# - ADVANTAGES ----

# A UNIQUE FENCING SYSTEM THAT COMBINES

The distinct perspective and lined structure of the slats also make your garden seem bigger than it

#### **VERSATILE AND MODULAR**

- Heights between 12 cm and 200 cm
- By using the corresponding U-profiles, the boards can be attached to the post in 4
- Standard width of the boards is 200cm but boards can be cut to length.













#### PARTS ALUMINIUM POSTS







DF4B200 Board 20 x 4 x 200 cm









RAI 7030 BAI 7021

DFPHA15

SG

(15cm)

Internal postholder

RAL 7030 RAL 7021



DF1SUPA

(to be used in

combination with

aluminium profile

DF4UBA40 as underprofile)

Aluminium support







Aluminium post hingeable 8,2 x 8,2 x 300 cm

DFRT10X6

10 x 6 mm

strip

Cellular rubber

DF1CA4.1 Cover cap aluminium post hingeable 8,2 x 9 x 2,8 cm (synthetic black)





DF4UTA40

Aluminium

top profile

4 x 200 cm





DF4UBA40

Aluminium

4 x 200 cm

bottom profile











100 x 2,7 x 180 cm 100 x 2,7 x 200 cm (including door hardware)







#### **SLAT WALL SYSTEM**

The Duofuse® slat wall system is a unique composite fence that combines design & durability.

A sleek slatted lamellae garden fence is a fixed added value for every house and every garden. They look equally beautiful and exclusive in all circumstances and cannot be distinguished at all from solid wood. The pronounced perspective and lines of the slats also make your garden look larger than it really is.

One of the big advantages of a composite fence is the fact that it never has to be oiled or stained again!

# RECYCLABLE AND SUSTAINABLE

**GRAPHITE BLACK** 



RAL 7030 RAL 7021

DF1UA42

Aluminium U-profile

GB

board DF4B200

4,2 x 220 cm

SG

for aluminium post & aluminium post



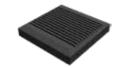


GB

DF1C09 Composite cover cap DESIGN L 90 m







DF1C11 Composite cover cap CLASSIC L 110 mm W 110 mm









#### **RANCH FENCING**

The durable and modular alternative for wooden or concrete fences. Duofuse offers you the perfect solution to fence off your garden in style or to keep horses, sheep and other animals in their pasture in true country style. Duofuse wood composite enclosures are in any event stronger and more durable than wooden fences, particularly because they do not rot, even in the dampest conditions.

They are also much more attractive and more timeless than concrete fences. The plank posts can be sunk into the ground or mounted on top of a low wall. Duofuse pasture fencing requires no maintenance, so you can spend more time on your animals.



### **ADVANTAGES**

# STRONGER AND MORE DURABLE THAN WOODEN RANCH FENCING, MORE BEAUTIFUL THAN CONCRETE FENCING

#### **VERSATILE AND MODULAR**

Heights between 12cm and 200cm are possible.

The number of boards and the space between the boards is free to choose

#### **APPLICATIONS**

Can be used for fencing for ranches, stables, gardens,... Ranch fencing can also be used in combination with tongue en groove system:

- Lower part can be a closed fencing and upper part open fencing.
- A number of closed fencing and then a number of ranch fencing.
- By using the corresponding U-profiles the boards can be attached to the post in 4 directions.
- Standard width 180 cm (can be shortened)

## **PARTS**



DF3B120 Board 12 x 2,7 x 180 cm (reinforced with steel)





DF1P90 Post 9 x 9 x 270/300 cm (reinforced with an aluminium core)





DF1C11
Cover cap CLASSIC
11 x 11 x 1,7 cm
(to avoid water
infiltration in the post)





DF1C09
Cover cap DESIGN
9 x 9 x 1,7 cm
(to avoid water
infiltration in the post)









DF3P27 Opvulprofiel 2,7 x 3,5 x 180 cm (to create distance between the boards)



DFPH60
Internal post holder tube 6 x 6 x 60 cm on plate 15 x 15 cm (optional - only needed when fixing the post on a terrace, concrete floor or wall)



DF1U27

boards)

Small U-profile

2,7 x 3,5 x 182/202 cm

(fitting system for the









# — PARTS —









	DFPR30	DFPR35	DFPR43	DFPR47
Width	30 mm	35 mm	43 mm	47 mm
Length	103 - 123 - 153 - 163 - 173 - 183 - 193 - 203 cm	103 - 123 - 153 - 163 - 173 - 183 - 193 - 203 cm	103 - 123 - 153 - 163 - 173 - 183 - 193 - 203 cm	103 - 123 - 153 - 163 - 173 - 183 - 193 - 203 cm
Thickness	3 mm	3 mm	3 mm	3 mm
Colour				
Coloui	WB GB	WB GB	WB GB	WB GB





















DFPR49
Top profile
PVC small
4,9 x 1,8 x 247 cm



DFPR49L Top profile PVC large 4,9 x 2,3 x 247 cm









WB GB



#### **3 DIFFERENT INSTALLATION METHODES**

#### PRIVACY SLATS

These wood composite slats are the aesthetic solution to enjoy your garden in privacy. They are easy to maintain and easy to install yourself.

They not only guarantee the necessary privacy, but also provide protection against the wind and can reduce street noise.

The slats are available in different widths and lengths so that they fit into the current systems of wire panels.

The available finishing profiles ensure a perfect result.



## **ADVANTAGES**

**QUALITY & AESTHETICAL** 

**OPTIMAL PRIVACY** 

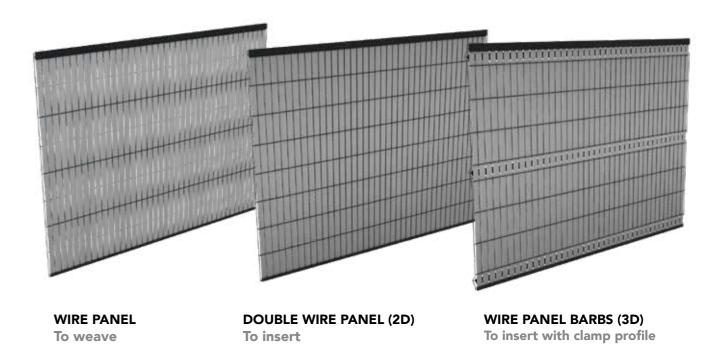
WIND PROTECTION

SOUNDPROOFING

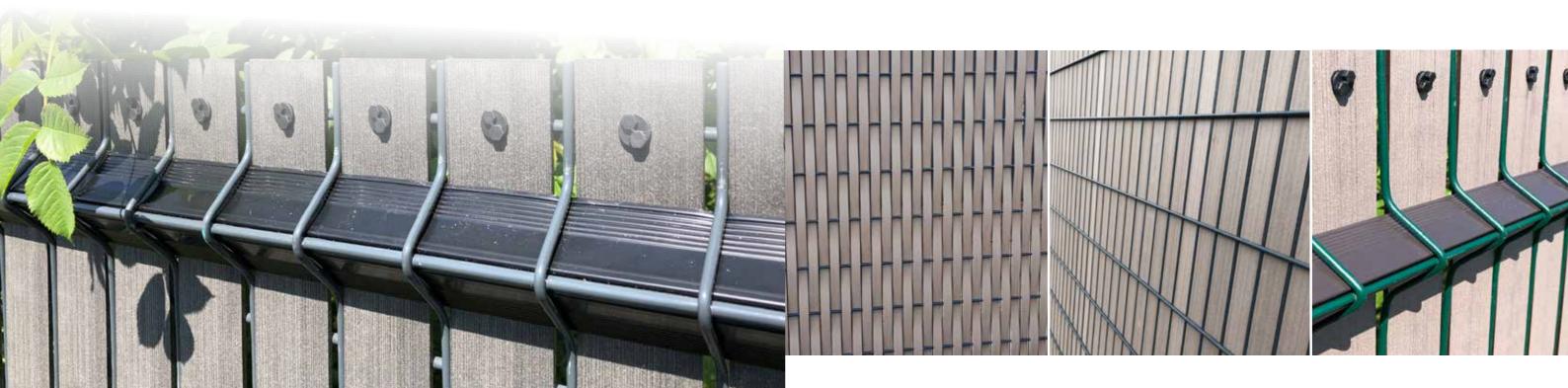
#### **DIFFERENT WIDTHS AND LENGTHS**

The slats are available in 4 different widths: 30 mm, 35 mm, 43 mm, 47 mm.

The standard lengths are: 1030 mm, 1230 mm, 1530 mm, 1630 mm, 1730 mm, 1830 mm, 1930 mm & 2030 mm.



# PRIVACY MEETS COMFORT



#### COLOUR CHANGING

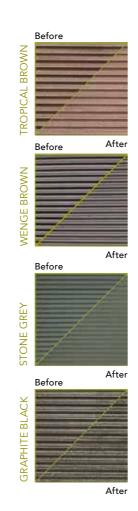
After several days, the product will begin to fade slightly. This is a temporary and a natural process due to the leaking of the lignin. Afterwards the original colour will return.

The reason is that the wood composite material contains 50% PVC and 50% wood flour. Wood flour contains lignin in the cell wall and together with cellulose it determines the strength of wood. By sanding the surface during the manufacturing process, the wood fibres release the lignin and following exposure to UV light a slight discolouration occurs. In this early stage, Stone Grey and Graphite Black get a yellow/green tint. The sun and rain loosen the lignin on the surface and a brown/yellow substance emerges. This substance is completely harmless and is responsible for the colour change. This may cause water circles or drip edges on the wood composite profiles. The more irrigated the boards, the faster the lignin dissapears from the wall and after a few weeks/months, the original colour of the panels will be regained. If you wish to speed up this process you can rinse the product regularly with water.

Boards that have started to fade can be perfectly positioned with boards that have not been subject to this discolouration process. Over time, all the boards will have the same even colour. Below is the original colour with adjacent the final colour.

There can be slight colour differences between different production series as 50% of the material is made of wood.

Regarding the decking with a wood grain structure, you should take into account that the contrast of the wood grain will fade after a certain time.



#### **AVAILABLE COLOURS**

#### TROPICAL BROWN



STONE GREY



#### WENGE BROWN



**GRAPHITE BLACK** 



#### Decking, Tongue and groove boards system, Slat wall system, Ranch fencing, Privacy slats

The colours and brushing may differ from one production to another and are not contractually binding. It is not reccomended to mix boards from different production batches. The date of production can be found on every board. Make sure that all boards are placed in the same direction (inside each board, a mark is provided for this).

#### **MAINTENANCE**

#### WOOD COMPOSITE

Duofuse® wood composite is virtually maintenance free meaning that preservative products are completely superfluous. For normal maintenance, you can use a brush or high pressure washer (max. 80 bar). Feel free to use a mild cleaning agent, but it is not advisable to use a dirt killer.

Any grease and oil stains can be removed with a household degreaser. The best way to deal with persistent dirt such as organic stains, mould and slime build-up or moss is to use a diluted bleach solution (25% bleach at 10° with 75% water). Solvents must NOT be used. Always make sure that the joints are open for good drainage.

#### In case of staining:

- 1 Any stains are best removed straight away so that they cannot penetrate the material or dry up on it. Rinsing with water and a mild soap solution is recommended in this case.
- 2 If a stain is not removed immediately, it may dry up and penetrate the plank. If this is the case, thorough cleaning with a pressure washer and/or brushing in the direction of the grooves is best. The discolouration will stabilize after 6 to 10 weeks.

#### **ALUMINIUM**

Duofuse® aluminium garden fences guarantee optimum ease of maintenance so that you can enjoy years of privacy in your garden without extra care. The aluminium panels are largely dirtrepellent so they only need to be cleaned sporadically to remove surface dirt.

Over time, however, some staining may occur as dirt and dust dries, but this can be easily cleaned. Use a soft sponge or lint-free cloth and a solution of lukewarm water with mild soap. In any case, avoid abrasive tools such as a scrubbing brush.

Afterwards, simply rinse with clean water and let it dry.

**TIP:** If there is bird droppings on the panels, it is best to remove them as soon as possible to avoid damage to the material.





#### PEFC CERTIFIED

In Belgium, Plastivan is recognised as a PEFC-certified company. Our concern for the environment and the development of sustainable products has ensured that from today we are in a position to present this certificate. Duofuse wood composite consists of 50% wood flour. This wood comes from sustainably managed forests.

The wood flour is mixed with PVC in our own granulation plant to form WPC granules. These are then used in the production of wood composite decking boards and fencing. This production is fully integrated from raw material to finished product. Thanks to this investment, Plastivan now has full control over the entire production process.

#### WARRANTY

Plastivan nv offers a 10 year warranty for all mechanical properties of the Duofuse® decking, tongue and groove boards system, slat wall system and ranch fencing and against all ant and insect attacks. The warranty conditions are based on current knowledge and correct use of the product. Plastivan disclaims responsibility for damage caused by, or failure of, the product as a result of faulty installation caused by failure to follow the installation instructions that were available on the Plastivan website at the time of installation.

The warranty means damaged products will be replaced or refunded, taking into account a depreciation in relation to the already elapsed time and warranty period. Costs for replacement and removal, labour or other costs (e.g. transportation) are not covered by this warranty.

#### **TECHNICAL INFO**

#### CHARACTERISTICS AND TESTS ON DUOFUSE® WOOD COMPOSITE (GENERAL)

Description test	Conducted test	Value	Unit
Density at 20°C	EN ISO 1183-1 Method A	1.40	g/cm³
Vicat softening temperature	NBN EN ISO 306 Method B	86.2	°C
Traction characteristics			
Traction at 23°C Yield stress	NBN ISO 527-2	35.8	N/mm²
Modulus of elasticity at 23°C	NBN ISO 527-2	6990	N/mm²
Bending characteristics			
Flexural strength $\sigma_{_{b}}$	ISO 178	67.5	Мра
Modulus of elasticity (Flexural test) E <sub>b</sub>	ISO 178	6460	Мра
Brinell Hardness H <sub>b</sub>	EN 1534	111	-
Linear modulus of elongation	ASTM D696	0.018	mm/m.°C
Stress grading	EN 350	1	-
Verification of dimensional stability after immersion			
Max swelling in water after 28 days	EN 317	2.66	%
Max elongation in water after 28 days	EN 317	0.31	%
Rapid aging, discolouration	EN 513	≤ 2	grey scale
Verification of dimensional changes under changes of humidity	f		
from 65 % to 85 %	EN 1604	0.093	%
from 65 % to 30 %	EN 1604	0.135	%

#### CHARACTERISTICS AND TESTS ON DUOFUSE® (DECKING)

Description test	Conducted test	Value	Unit
Changes in length caused by internal tension	NBN EN 479	0,1	%
Changes in length caused by humidity	NBN EN 1087-1	< 0.75	%
Coefficient of kinetic friction			
dry samples	BN 86/6781-02	≥ 0.24	-
damped samples	BN 86/6781-02	≥ 0.12	-
oiled samples	BN 86/6781-02	≥ 0.08	-
Anti-slip characteristics	DIN 51130 PB-LF 40	R10	class
Abrasion resistance	EN ISO 5470-1	≤ 1000	mg
Fire reaction when using aluminum substructure	EN 13501-1	(see below)	-

	Graphite black	Stone grey	Tropical brown	Wenge brown
DFD140	B <sub>FL</sub> - s1			
DFD162	D <sub>FL</sub> - s2	D <sub>FL</sub> - s2	C <sub>FL</sub> - s1	C <sub>FL</sub> - s1
DFDE162	D <sub>FL</sub> - s2	D <sub>FL</sub> - s2	C <sub>FL</sub> - s1	C <sub>FL</sub> - s1
DFDS162	D <sub>.:</sub> - s2	D <sub>51</sub> - s2	B <sub>51</sub> - s1	B <sub>51</sub> - s1

		- FL	: FL	: FL	: FL	
	DFDS162	D <sub>FL</sub> - s2	D <sub>FL</sub> - s2	B <sub>FL</sub> - s1	B <sub>FL</sub> - s1	
Water absorption						
after 24h at 23°C		EN 317	< 2	2	%	
after 28 days at 23°C		EN 317	< 3	3.5	%	
Resistance to impact						
DFD162 / DFDE162 at a ten	nperature of 23°C	EN 477	5		J	
DFD140 / DFDS162 at a ten	nperature of 23°C	EN 477	15		J	
DFD162 / DFDE162 at a ten	nperature of 23°C	EN 477	4		J	
Bending properties						
DFD162 - E modulus		EN 310	± 4	1100	N/mm²	
DFDE162 - E modulus		EN 310	± 4	1100	N/mm²	
DFDS162 - E modulus		EN 310	± 3	3500	N/mm²	
DFD140 - E modulus		EN 310	± 7	7200	N/mm²	
Deflection under load of 1 k	N span 400 mm	EN 1533	1.4	1	mm	
Deflection under load of 1 k	(N span 500 mm	EN 1533	2.3	31	mm	
Verification of resistance to load	permissible concentrated	EN 12871	≤1	000	N	
Load in case of a crack		EN 310	≤ 3	315	kg	

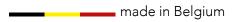
#### CHARACTERISTICS AND TESTS ON DUOFUSE® (TONGUE AND GROOVE BOARDS SYSTEM)

Description test	Conducted test	Value	Unit
Wind load (wind resistance)	NBN EN 12210	class 4	-











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