

31406  
CARLSON & COMPANY LTD.  
CALMOUNT PARK, BALLYMOUNT  
DUBLIN 12, IRELAND  
0000 Ireland  
00353-1-4625777

**Delivery address:**

Our ref.....: EZI  
Your ref.....: James  
Reqv. No.....: JSV/1605/8960  
Subject.....: Clonlea Lodge A  
  
Week of ship.:  
Day of ship.:  
Date.....: 23-06-2016  
Serie.....:  
Rev.....: 1

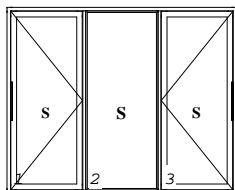
**Please note: All our drawings are seen from the outside**

The following quotation is for Outline HORIZONT ENERGY standard profiles and hinging mechanisms.

FRAME TREATMENT WOOD.. Ral 9010 Pure White  
ALL SASHES

SASH TREATMENT WOOD... Ral 9010 Pure White  
FRAME TREATMENT ALU... Ral 7016 Anthracite grey (Gloss 30)  
SASH TREATMENT ALU.... Ral 7016 Anthracite grey (Gloss 30)

Pos	Type	No's	Unit	Description:	Width x height	EUR/each	Total
1	5KVDU3-3F1--	1	pcs	window door W01 Uw: 1.00 W/m2K Ew: -16.5 kWh/m2 LT: 73 % g: 50 % Glasandel: 75 % Modelareal: 4.10 m2 Weight: 180 kg PROFILE SYSTEM..... Classic with window board groove SASH1 OPERATION..... Windows door w/security espagn. w/brakes L/OUT SASH3 OPERATION..... Windows door w/security espagn. w/brakes R/OUT SASH : 1,3 AREAL CONTENTS..... Lam Low-e/Float/Lam Low-e 3/3-12-4-12/3/ SASH : 2 AREAL CONTENTS..... Lam Low-e/Float/Lam Low-e 3/3-10-4-10-3/ ACCESSORIES..... Conc. L/Jamb Alu/Grey Clickvent 40 /AREA 1 ACCESSORIES..... Conc. R/Jamb Alu/Grey Clickvent 40 /AREA 3 ACCESSORIES..... Insect mesh for vent /AREA 0 Window door with friction brake and standard window handle. Handle placement - 1000mm from bottom	2248 x 1823	*,**	*,**
				Transport			*,**



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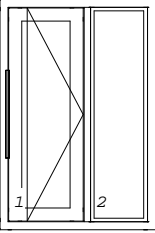
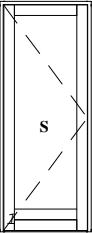
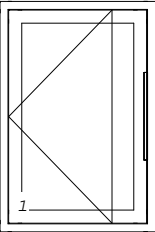
Page: 2

Pos	Type	No's	Unit	Description:	Width x height	EUR/each	Total
				Transport			*,**
2	5KDU2-2F1-1~	1	pcs	Træ/Alu Dørparti Energy 3-lags m/tapstk D01 Uw: 1.08 W/m2K LT: 73 % g: 50 % Glasandel: 47 % Modelareal: 3.59 m2 Weight: 138 kg PROFILE SYSTEM..... Classic o/out alu threshold SASH1 OPERATION..... 4 point espagnolette,friction brake,Lock L/OUT SASH2..... Classic o/out,alu threshold FRAME P-MESS1..... 978.0 mm. SASH : 1-2 SASH P-MESS2..... 741.0 mm. SASH : 1 AREA2 CONTENTS..... 40mm Raised alu/ Raised hdf SASH : 1 AREA4 CONTENTS..... Lam Low-e/Float/Lam Low-e 3/3-12-4-12/3/ SASH : 2 AREA2 CONTENTS..... 36 mm Raised alu/ Raised hdf SASH : 2 AREA3 CONTENTS..... Lam Low-e/Float/Lam Low-e 3/3-10-4-10-3/ ACCESSORIES..... Db.Terrace door handle Cyl/Thumbturn SAA /AREA 1 Terrace door with FIX espagnolette. With friction brake. Hole for handle/cylinder (accessories)	1498 x 2398	*,**	*,**
3	5FK1-1	1	pcs	Horizont Fixed frame Energy 3-Layers W02 Uw: 1.01 W/m2K Ew: -11.7 kWh/m2 LT: 73 % g: 50 % Glasandel: 81 % Modelareal: 1.53 m2 Weight: 71 kg PROFILE SYSTEM..... Classic w/out window board groove SASH : 1 AREA1 CONTENTS..... Lam Low-e/Float/Lam Low-e 3/3-10-4-10-3/	673 x 2273	*,**	*,**
				Transport			*,**

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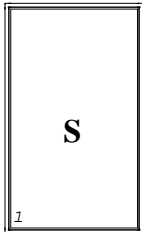
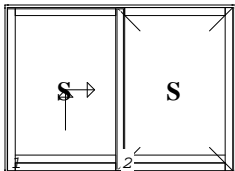
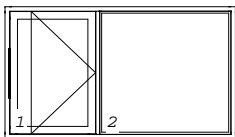
Page: 3

Pos	Type	No's	Unit	Description:	Width x height	EUR/each	Total
				Transport			*,**
4	5KVU2-2Fl-1~	1	pcs	Horizont Window Energy 3-layers W03 Uw: 1.15 W/m2K Ew: -47.8 kWh/m2 LT: 74 % g: 53 % Glasandel: 54 % Modelareal: 0.67 m2 Weight: 27 kg PROFILE SYSTEM..... Classic with window board groove SASH1 OPERATION..... Sidehung on reflex w/security espagn.M3 L/OUT SASH : 1 AREA1 CONTENTS..... Low-e/Float/Low-e 4-14-4-14-4 SASH : 2 AREA1 CONTENTS..... Low-e/Float/Low-e 4-12-4-12-4 MULLION1 XK..... 378.0 mm. ACCESSORIES..... Conc. L/Jamb Alu/Grey Clickvent 40 /AREA 1 ACCESSORIES..... Insect mesh for vent /AREA 0	673 x 998	*,**	*,**
							
5	5DI1-1	1	pcs	Horizont Door Energy 3-layers D02 Uw: 1.04 W/m2K LT: 73 % g: 50 % Glasandel: 58 % Modelareal: 2.27 m2 Weight: 102 kg PROFILE SYSTEM..... Classic o/in, alu threshold SASH1 OPERATION..... 4 point espagnolette,friction brake,Lock R/IN SASH : 1 AREA2 CONTENTS..... Lam Low-e/Float/Lam Low-e 3/3-12-4-12/3/ ACCESSORIES..... Db.Terrace d.handle Cyl/Thumbturn SAA /AREA 1 NOTE! Frame in Softline profile, due to inward opening construction. Terrace door with FIX espagnolette. With friction brake. Hole for handle/cylinder (accessories)	948 x 2398	*,**	*,**
							
6	5VU1-1	1	pcs	Horizont Window Energy 3-Layers W04 Uw: 1.01 W/m2K Ew: -30.8 kWh/m2 LT: 74 % g: 53 % Glasandel: 58 % Modelareal: 0.67 m2 Weight: 25 kg PROFILE SYSTEM..... Classic with window board groove SASH1 OPERATION..... Sidehung on reflex w/security espagn.M3 R/OUT SASH : 1 AREA1 CONTENTS..... Low-e/Float/Low-e 4-14-4-14-4 ACCESSORIES..... Conc. R/Jamb Alu/Grey Clickvent 40 /AREA 1 ACCESSORIES..... Insect mesh for vent /AREA 0	673 x 998	*,**	*,**
							
				Transport			*,**

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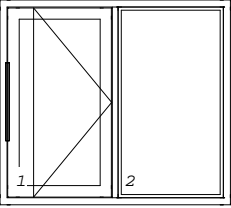
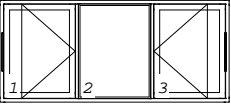
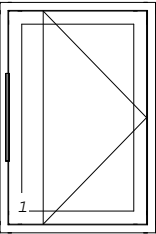
Page: 4

Pos	Type	No's	Unit	Description:	Width x height	EUR/each	Total
				Transport			*,**
7*	5FK1-1	1	pcs	Horizont Fixed frame Energy 3-Layers W05 Uw: 0.96 W/m2K Ew: -1.1 kWh/m2 LT: 73 % g: 50 % Glasandel: 87 % Modelareal: 2.39 m2 Weight: 108 kg PROFILE SYSTEM..... Classic w/out window board groove SASH : 1 AREAL CONTENTS..... Lam Low-e/Float/Lam Low-e 3/3-10-4-10-3/	1198 x 1998	*,**	*,**
							
8	5HSK2-1-1-V	1	pcs	Horizont Sliding d. L sash going Energy D03 Uw: 0.95 W/m2K LT: 74 % g: 53 % Glasandel: 72 % Modelareal: 7.87 m2 Weight: 280 kg PROFILE SYSTEM..... Classic o/out, hardwood threshold, master ACCESSORIES..... Handle inside, fingergrip outside SAA /AREA 1 SASH2..... Classic o/out, hardwood threshold, fixed SASH : 1-2 AREAL CONTENTS..... Thg Low-e/F1/Thg Low-e 4-14-4-14-4 *** Door slides on the outside *** *** Side frames are always Softline *** ***** NOTICE! Hardwood threshold without aluclad. The aluclad on side frames and mullions stops by the top of hardwood threshold. *****	3283 x 2398	*,**	*,**
							
9	5KVU2-2F1-1~	1	pcs	Horizont Window Energy 3-layers W06 Uw: 0.95 W/m2K Ew: -8.6 kWh/m2 LT: 74 % g: 53 % Glasandel: 74 % Modelareal: 1.73 m2 Weight: 62 kg PROFILE SYSTEM..... Classic with window board groove SASH1 OPERATION..... Sidehung on reflex w/security espagn.M3 L/OUT SASH : 1 AREAL CONTENTS..... Low-e/Float/Low-e 4-14-4-14-4 SASH : 2 AREAL CONTENTS..... Low-e/Float/Low-e 4-12-4-12-4 MULLION1 XK..... 700.0 mm. ACCESSORIES..... Conc. L/Jamb Alu/Grey Clickvent 40 /AREA 1 ACCESSORIES..... Insect mesh for vent /AREA 0	1738 x 998	*,**	*,**
							
				Transport			*,**

Our ref.....: EZI  
 Reqy. No.....: JSV/1605/8960  
 Subject.....: Clonlea Lodge A

Date: 23-06-2016

Page: 5

Pos	Type	No's	Unit	Description:	Width x height	EUR/each	Total
				Transport			*,**
10	5KVU2-2F1-1~	1	pcs	Horizont Window Energy 3-layers W07 Uw: 1.02 W/m2K Ew: -22.5 kWh/m2 LT: 74 % g: 53 % Glasandel: 67 % Modelareal: 1.12 m2 Weight: 42 kg PROFILE SYSTEM..... Classic with window board groove SASH1 OPERATION..... Sidehung on reflex w/security espagn.M3 L/OUT SASH : 1 AREAL CONTENTS..... Low-e/Float/Low-e 4-14-4-14-4 SASH : 2 AREAL CONTENTS..... Low-e/Float/Low-e 4-12-4-12-4 ACCESSORIES..... Conc. L/Jamb Alu/Grey Clickvent 40 /AREA 1 ACCESSORIES..... Insect mesh for vent /AREA 0	1123 x 998	*,**	*,**
							
11	5KVU3-3F1-2~	1	pcs	Horizont Window Energy 3-layers W08 Uw: 0.98 W/m2K Ew: -16.0 kWh/m2 LT: 74 % g: 53 % Glasandel: 70 % Modelareal: 2.24 m2 Weight: 81 kg PROFILE SYSTEM..... Classic with window board groove SASH1 OPERATION..... Sidehung on reflex w/security espagn.M3 L/OUT SASH3 OPERATION..... Sidehung on reflex w/security espagn.M3 R/OUT SASH : 1,3 AREAL CONTENTS..... Low-e/Float/Low-e 4-14-4-14-4 SASH : 2 AREAL CONTENTS..... Low-e/Float/Low-e 4-12-4-12-4 ACCESSORIES..... Conc. L/Jamb Alu/Grey Clickvent 40 /AREA 1 ACCESSORIES..... Conc. R/Jamb Alu/Grey Clickvent 40 /AREA 3 ACCESSORIES..... Insect mesh for vent /AREA 0	2248 x 998	*,**	*,**
							
12	5VU1-1	2	pcs	Horizont Window Energy 3-Layers W09/10 Uw: 1.01 W/m2K Ew: -30.8 kWh/m2 LT: 74 % g: 53 % Glasandel: 58 % Modelareal: 0.67 m2 Weight: 25 kg PROFILE SYSTEM..... Classic with window board groove SASH1 OPERATION..... Sidehung on reflex w/security espagn.M3 L/OUT SASH : 1 AREAL CONTENTS..... Low-e/Float/Low-e 4-14-4-14-4 ACCESSORIES..... Conc. L/Jamb Alu/Grey Clickvent 40 /AREA 1 ACCESSORIES..... Insect mesh for vent /AREA 0	673 x 998	*,**	*,**
							
				Transport			*,**

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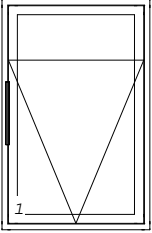
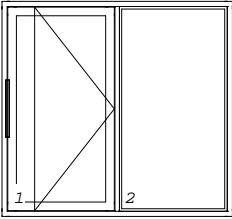
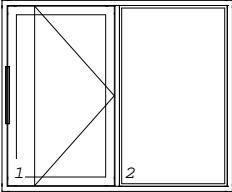
Page: 6

Pos	Type	No's	Unit	Description:	Width x height	EUR/each	Total
				Transport			*,**
13*	5KVU2-2Fl-1~	1	pcs	Horizont Window Energy 3-layers	1798 x 1398	*,**	*,**
				W11			
				Uw: 0.92 W/m2K Ew: -1.7 kWh/m2			
				LT: 74 % g: 53 % Glasandel: 78 %			
				Modelareal: 2.51 m2 Weight: 88 kg			
				PROFILE SYSTEM..... Classic with window board groove			
				SASH1 OPERATION..... Sidehung on reflex w/security espagn.M7 L/OUT			
				SASH : 1			
				AREAL CONTENTS..... Low-e/Float/Low-e 4-14-4-14-4			
				SASH : 2			
				AREAL CONTENTS..... Low-e/Float/Low-e 4-12-4-12-4			
				MULLION1 XK..... 700.0 mm.			
				ACCESSORIES..... Conc. L/Jamb Alu/Grey Clickvent 40 /AREA 1			
				ACCESSORIES..... Insect mesh for vent /AREA 0			
				ACCESSORIES..... Restrictor IPA 21230 - bottom sash /AREA 1			
				* Approved for fire escape *			
14	5VU1-1	1	pcs	Horizont Window Energy 3-Layers	898 x 1398	*,**	*,**
				W12			
				Uw: 0.93 W/m2K Ew: -14.4 kWh/m2			
				LT: 72 % g: 52 % Glasandel: 68 %			
				Modelareal: 1.26 m2 Weight: 45 kg			
				PROFILE SYSTEM..... Classic with window board groove			
				SASH1 OPERATION..... Topguided with espagnolette T/G			
				SASH : 1			
				AREAL CONTENTS..... Low-e/Satin/Low-e 4-14-4-14-4			
				ACCESSORIES..... Conc. L/Jamb Alu/Grey Clickvent 40 /AREA 1			
				ACCESSORIES..... Insect mesh for vent /AREA 0			
15*	5FK1-1	1	pcs	Horizont Fixed frame Energy 3-Layers	673 x 1843	*,**	*,**
				W13			
				Uw: 1.02 W/m2K Ew: -13.3 kWh/m2			
				LT: 73 % g: 50 % Glasandel: 81 %			
				Modelareal: 1.24 m2 Weight: 58 kg			
				PROFILE SYSTEM..... Classic with window board groove			
				SASH : 1			
				AREAL CONTENTS..... Lam Low-e/Float/Lam Low-e 3/3-10-4-10-3/			
				Transport			*,**

Our ref.....: EZI  
 Reqy. No.....: JSV/1605/8960  
 Subject.....: Clonlea Lodge A

Date: 23-06-2016

Page: 7

Pos	Type	No's	Unit	Description:	Width x height	EUR/each	Total
				Transport			*,**
16*	5VU1-1	1	pcs	Horizont Window Energy 3-Layers W14 Uw: 0.93 W/m2K Ew: -14.4 kWh/m2 LT: 72 % g: 52 % Glasandel: 68 % Modelareal: 1.26 m2 Weight: 45 kg PROFILE SYSTEM..... Classic with window board groove SASH1 OPERATION..... Topguided with espagnolette T/G SASH : 1 AREAL CONTENTS..... Low-e/Satin/Low-e 4-14-4-14-4 ACCESSORIES..... Conc. L/Jamb Alu/Grey Clickvent 40 /AREA 1 ACCESSORIES..... Insect mesh for vent /AREA 0	898 x 1398	*,**	*,**
							
17	5KVU2-2F1-1~	1	pcs	Horizont Window Energy 3-layers W15 Uw: 0.94 W/m2K Ew: -7.1 kWh/m2 LT: 74 % g: 53 % Glasandel: 75 % Modelareal: 2.09 m2 Weight: 74 kg PROFILE SYSTEM..... Classic with window board groove SASH1 OPERATION..... Sidehung on reflex w/security espagn.M7 L/OUT SASH : 1 AREAL CONTENTS..... Low-e/Float/Low-e 4-14-4-14-4 SASH : 2 AREAL CONTENTS..... Low-e/Float/Low-e 4-12-4-12-4 ACCESSORIES..... Conc. L/Jamb Alu/Grey Clickvent 40 /AREA 1 ACCESSORIES..... Insect mesh for vent /AREA 0 ACCESSORIES..... Restrictor IPA 21230 - bottom sash /AREA 1 * Approved for fire escape *	1498 x 1398	*,**	*,**
							
18*	5KVU2-2F1-1~	1	pcs	Horizont Window Energy 3-layers W16 Uw: 0.95 W/m2K Ew: -9.0 kWh/m2 LT: 74 % g: 53 % Glasandel: 74 % Modelareal: 1.86 m2 Weight: 66 kg PROFILE SYSTEM..... Classic with window board groove SASH1 OPERATION..... Sidehung on reflex w/security espagn.M7 L/OUT SASH : 1 AREAL CONTENTS..... Low-e/Float/Low-e 4-14-4-14-4 SASH : 2 AREAL CONTENTS..... Low-e/Float/Low-e 4-12-4-12-4 ACCESSORIES..... Conc. L/Jamb Alu/Grey Clickvent 40 /AREA 1 ACCESSORIES..... Insect mesh for vent /AREA 0 ACCESSORIES..... Restrictor IPA 21230 - bottom sash /AREA 1 Transport	1498 x 1243	*,**	*,**
							

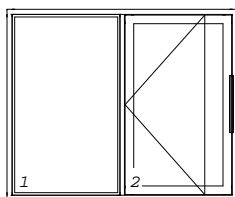
Our ref.....: EZI  
 Reqv. No.....: JSV/1605/8960  
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Page: 8

Pos	Type	No's	Unit	Description:	Width x height	EUR/each	Total
				Transport			*,**
				* Approved for fire escape *			

19	5KVU2-2F1-1~	1	pcs	Horizont Window Energy 3-Layers	1498 x 1243	*,**	*,**
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W17  
 Uw: 0.95 W/m2K Ew: -9.0 kWh/m2  
 LT: 74 % g: 53 % Glasandel: 74 %  
 Modelareal: 1.86 m2 Weight: 66 kg  
 PROFILE SYSTEM..... Classic with window board groove  
 SASH2 OPERATION..... Sidehung on reflex w/security espagn.M7 R/OUT  
 SASH : 1  
 AREAL CONTENTS..... Low-e/Float/Low-e 4-12-4-12-4  
 SASH : 2  
 AREAL CONTENTS..... Low-e/Float/Low-e 4-14-4-14-4  
 ACCESSORIES..... Conc. R/Jamb Alu/Grey Clickvent 40 /AREA 2  
 ACCESSORIES..... Insect mesh for vent /AREA 0

20	For inward opening doors, situations can arise where water can penetrate due to massive wind pressure caused by extreme weather conditions.
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21	This order will be produced with FSC certified timber. Curved, Panels and Plankdoors are not FSC certified. Certifikation: FSC Mixed 70% - SW-COC-003340
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Total units: 20 (1608 Kg.) (30.2 length meters)

Total circumference: 113.21 m bottom frame: 26.41 m

Average U-value: 0.98 W/m²K

TOT. \*,\*\*

The quotation will be valid for 30 days from today's date.

Salgs- & leveringsbetingelser ses på [www.vinduesindustrien.dk](http://www.vinduesindustrien.dk)

TOTAL/EUR \*,\*\*



## Energy calculation - Data overview

Pos	Model	Qty	SqM	Ew	Uw	Gw	LT	Gg	Ff	Eref	Cl.
1	5KVDU3-3F1-2R1-1-01	1	4.10	-16.5	1.00	0.38	0.73	0.50	0.75		
2	5KDU2-2F1-1R1-TL2-01	1	3.59		1.08	0.23	0.73	0.50	0.47		
3	5FK1-1	1	1.53	-11.7	1.01	0.41	0.73	0.50	0.81		
4	5KVU2-2F1-1R1-1-01	1	0.67	-47.8	1.15	0.29	0.74	0.53	0.54		
5	5DI1-1	1	2.27		1.04	0.29	0.73	0.50	0.58		
6	5VU1-1	1	0.67	-30.8	1.01	0.31	0.74	0.53	0.58		
7	5FK1-1	1	2.39	-1.1	0.96	0.44	0.73	0.50	0.87		
8	5HSK2-1-1-V	1	7.87		0.95	0.38	0.74	0.53	0.72		
9	5KVU2-2F1-1R1-1-01	1	1.73	-8.6	0.95	0.39	0.74	0.53	0.74		
10	5KVU2-2F1-1R1-1-01	1	1.12	-22.5	1.02	0.36	0.74	0.53	0.67		
11	5KVU3-3F1-2R1-1-01	1	2.24	-16.0	0.98	0.37	0.74	0.53	0.70		
12	5VU1-1	2	1.34	-30.8	1.01	0.31	0.74	0.53	0.58		
13	5KVU2-2F1-1R1-1-01	1	2.51	-1.7	0.92	0.41	0.74	0.53	0.78		
14	5VU1-1	1	1.26	-14.4	0.93	0.36	0.72	0.52	0.68		
15	5FK1-1	1	1.24	-13.3	1.02	0.40	0.73	0.50	0.81		
16	5VU1-1	1	1.26	-14.4	0.93	0.36	0.72	0.52	0.68		
17	5KVU2-2F1-1R1-1-01	1	2.09	-7.1	0.94	0.40	0.74	0.53	0.75		
18	5KVU2-2F1-1R1-1-01	1	1.86	-9.0	0.95	0.39	0.74	0.53	0.74		
19	5KVU2-2F1-1R2-1-01	1	1.86	-9.0	0.95	0.39	0.74	0.53	0.74		
TOTAL/Average:		20	41.63	-16.8	0.98	0.36	0.73	0.52	0.69		

Ew = Energy gain for the window in its current size and form (kWh/m2)

Uw = Dark U-Value (W/m2k). Heat loss of the window (night)

Gw = Share of total solar energy passing through the window and into the building

LT = Light transmittance. Share of visible sunlight passing through the glass and into the building

Gg = Share of total sunlight passing through the glass and into the building

Ff = Glass portion. Visible glass compared to the total size of the window

Eref = Energy balance for reference window. Cl. = Eref Class