



# **Obitus Bespoke Pressure Reducing Cushions**

A Direct Healthcare Group Company

Qbitus' bespoke pressure reducing cushion range offers wheelchair cushion solutions to suit a wide variety of needs, whilst the nature of our manufacturing enables us to make almost all of our cushions to bespoke sizes and drawings as provdied.

#### **Obitus Range:**

Community	The Community range of cushioning was specifically designed with community nursing and practices in mind, ensuring the cushions are easy to install and easy to clean.
Mercury®	The Mercury <sup>®</sup> range offers contoured cushions for those considered At Risk through to Very High Risk of developing pressure ulcers.
Mercury <sup>®</sup> Xtreme	The Mercury <sup>®</sup> Xtreme range offers the same properties of the Mercury <sup>®</sup> range but with more severe contouring for enhanced postural support.
Q-Care	The Q-Care range offers optionality for the addition, omission or adjustment of adduction and abduction for users who require high-level postural support while seated.
Dynamic	The Dynamic range consists of the most advanced memory foams available, including the highly regarded Sunmate® and Pudgee® cushions with high load bearing capability.

#### **Evaluation Methodology**

A calibrated FSA pressure mapping system (serial no UT3010-7125) was placed over a range of Qbitus cushions. For these specific tests, a suitable test subject (Volunteer A), a female, height 1.65 metres with a body weight of 60kg and a BMI of 22, was used.

Volunteer A was placed in a sitting position on the cushion on a standard static bedside chair.

All pressure mapping has been analysed in conjunction with the Welsh Wound Innovation Centre (WWIC).

"Pressure mapping is an important means of assessing performance of pressure redistributing surfaces. It is, however, only one parameter that allows individuals to assess performance of materials and devices. The data generated by testing 10 Qbitus cushions did appear to show these products were able to envelop and immerse the buttocks while seated."

**Professor Keith Harding** Medical Director, WWIC

Professor Michael Clark Commercial Director, WWIC

WELSH WOUND INNOVATION ARLOESEDD **CLWYFAU CYMRU** 

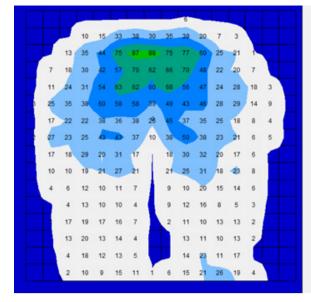
### Castletop Plus (Firm)

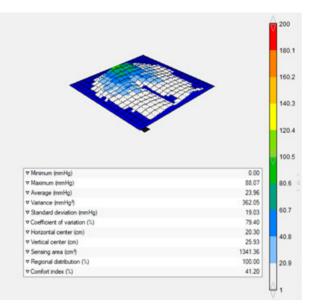
The Castletop Plus (Firm) is a 3" thick cushion made from castellated CM60 foam.

Maximum Pressure: 88 mmHg

Average Pressure: 23 mmHg







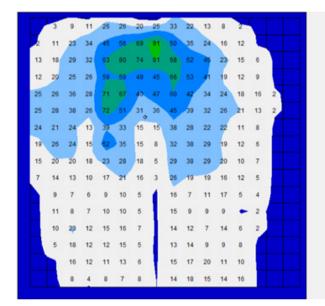
### Community One

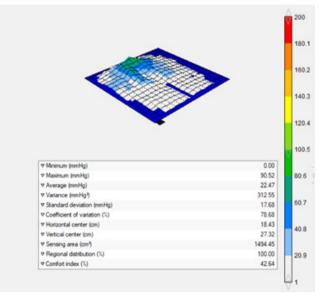
The Community One is a 3" thick cushions with a 1" CM60 core and 1" thick pink visco top and bottom.

Maximum Pressure: 90 mmHg

Average Pressure: 22 mmHg





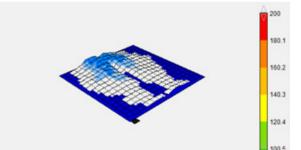


## Community Two

The Community Two is a 3" thick cushions with a 1" CM60 core and 1" thick Sunmate  $^{\otimes}$  top and bottom.

Maximum Pressure: 60 mmHg





#### Average Pressure: 18 mmHg



3	15	17	12	30	28	24	17	25	19	12	8	2
	10	11	15	12	23	18	9	18	17	12	5	2
	2	5	8	13	15	12	10	13	14	10	7	
			5	6	4	M	3	4	7	10	2	
			5	7	5		1	4	7	4		
		7	7	9	6			3	3	4		
		2	5	6	3			5	2	1		
			1	4	1			7	7	3	1	
			2	6	8	6	7	19	19	10	7	

7 Minimum (mmHg)	0.00	
7 Maximum (mmHg)	60.46	80.6
7 Average (mmHg)	18.55	100000
Variance (mmHg?)	227.41	
Standard deviation (mmHg)	15.08	60.7
Coefficient of variation (%)	81.28	
→ Horizontal center (cm)	19.18	40.8
7 Vertical center (cm)	30.46	40.0
♥ Sensing area (cm³)	1290.33	
Pregional distribution (%)	100.00	20.9
♥ Comfort index (%)	37.45	

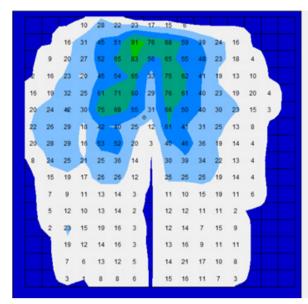
#### Mercury<sup>®</sup> 175

The Mercury<sup>®</sup> 175 is a 3.5" thick, contoured cushion made with RX39 foam and a viscoelastic lschial Tuberosity insert.

Maximum Pressure: 91 mmHg

Average Pressure: 25 mmHg





		180
		160.
		140
<b>*</b>		120.
	A	100
	V	
♥ Minimum (mmHg)	0.00	
	0.00	80.6
▼ Maximum (mmHg)		80.6
♥ Maximum (mmHg) ♥ Average (mmHg)	90.83	
⊽ Maximum (mmHg) ⊽ Average (mmHg) ⊽ Variance (mmHg?)	90.83 24.69	
⊽ Maximum (mniHg) ⊽ Average (mmHg) ⊽ Variance (mmHg <sup>a</sup> ) ⊽ Standard deviation (mmHg)	90.83 24.69 376.60	
♥ Maximum (mnHg) ♥ Average (mnHg) ♥ Variance (mnHg <sup>3</sup> ) ♥ Sandard deviation (mnHg) ♥ Coefficient of variation (%)	90.83 24.69 376.60 19.41	60.7
♥ Maximum (mmHg) ♥ Varance (mmHg) ♥ Varance (mmHg?) ♥ Coefficient of variation (%) ♥ Horizontal center (cm)	90.83 24.69 376.60 19.41 78.61	80.6 60.7 40.8
▼ Maximum (mmHg) ▼ Average (mmHg) ▼ Variance (mmHg <sup>2</sup> ) ▼ Standard deviation (mmHg) ♥ Coefficient of variation (%) ♥ Horizontal center (cm) ▼ Vertical center (cm)	90.83 24.69 376.60 19.41 78.61 19.07	60.7
Minimum (mmHg) Maximum (mmHg) Variage (mmHg) Variage (mmHg) Variage (mmHg?) Variage (mmHg?) Coefficient of variation (%) Vortaontal center (on) Vertoal center (om)	90.83 24.69 376.60 19.41 78.61 19.07 27.10	60.7

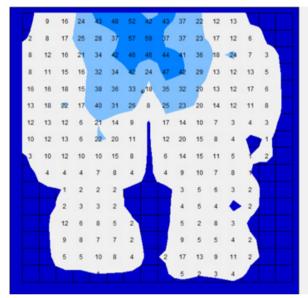
#### Mercury<sup>®</sup> 300

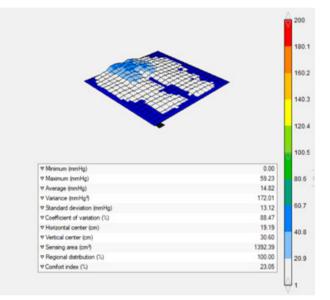
The Mercury<sup>®</sup> 300 cushion is a 3.5" thick, contoured cushion made from viscoelastic foam and a gel lschial Tuberosity insert.

Maximum Pressure: 58 mmHg

Average Pressure: 15 mmHg



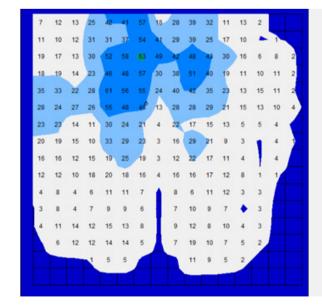


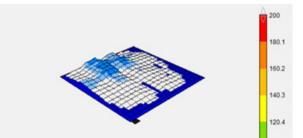


## Mercury<sup>®</sup> 300 Xtreme

The Mercury<sup>®</sup> 300 Xtreme cushion is a 3.5" thick, highly contoured cushion made from viscoelastic foam and a gel lschial Tuberosity insert.

Maximum Pressure: 63 mmHg





#### Average Pressure: 18 mmHg



	I	100.
▼ Minimum (mmHg)	0.00	
▼ Maximum (mmHg)	62.68	80.6
♥ Average (mmHg)	18.39	
♥ Variance (mmHg³)	211.74	
▼ Standard deviation (mmHg)	14.55	60.7
	79.12	
♥ Horizontal center (cm)	18.12	40.8
♥ Vertical center (cm)	28.94	40.8
⊽ Sensing area (cm²)	1516.32	
▼ Regional distribution (%)	100.00	20.9
Comfort index (%)	41.75	

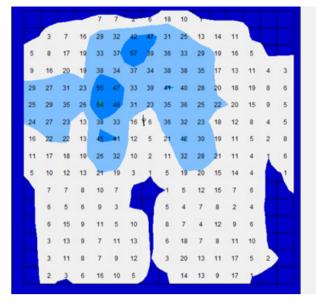
#### Q-Care Integra 2

The Q-Care Integra 2 is a 3" thick cushion with a CM60 base, RX39 overlay, Sunmate® foam core and adductor pads.

Maximum Pressure: 64 mmHg

Average Pressure: 17 mmHg





		180.1
		160.2
		140.3
$\mathbf{\mathbf{v}}$		120.4
		100.5
⊽ Minimum (mmHg)	0.00	100.5
	0.00 63.73	100.5
▼ Maximum (mmHg)		
v Minimum (mnHg) v Maximum (mnHg) v Average (mnHg) v Vatance (mnHg <sup>9</sup> )	63.73	80.6
v Maximum (mmHg) v Average (mmHg) v Variance (mmHg²)	63.73 16.68	
v Maximum (mmHg) v Average (mmHg) v Variance (mmHg <sup>a</sup> ) v Standard deviation (mmHg)	63.73 16.68 162.29	80.6
v Maximum (mmHg) v Average (mmHg) v Variance (mmHg <sup>3</sup> ) Φ Standard deviation (mmHg) Φ Coefficient of variation (%)	63.73 16.68 162.29 12.74	80.6 60.7
v Maximum (nmHg) v Average (nmHg) v Variance (nmHg <sup>2</sup> ) or Standard deviation (nmHg) or Coefficient of variation (%) v Horizontal center (cm)	63.73 16.68 162.29 12.74 76.39	80.6
v Maximum (mmHg) v Average (mmHg) v Variance (mmHg?) v Sandard deviation (mmHg) v Coefficient of variation (%) v Forizznat Genter (cm) v Vertical center (cm)	63.73 16.68 162.29 12.74 76.39 19.19	80.6 60.7
⊽ Maximum (mmHg) ⊽ Average (mmHg)	63.73 16.68 162.29 12.74 76.39 19.19 25.94	80.6 60.7

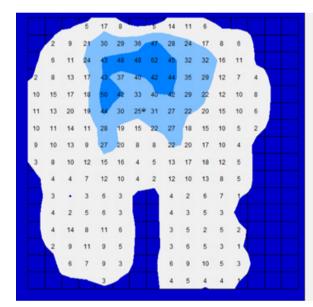
## Pudgee<sup>®</sup>

The Pudgee<sup>®</sup> cushion has a variable thickness and is made from a polymeric gel foam.

Max Pressure: 62 mmHg

Average Pressure: 14 mmHg



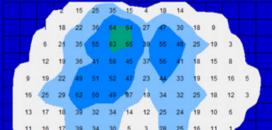


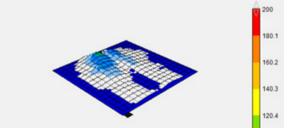
×	
⊽ Minimum (mmHg)	0.00
v Minimum (mniHg) v Maximum (mniHg)	0.00 61.59
v Maximum (mmHg)	61.59
⊽ Maximum (mmHg) ⊽ Average (mmHg)	61.59 14.36
v Maximum (mmHg) v Average (mmHg) v Variance (mmHg?)	61.59 14.36 159.03
v Maximum (mmHg) v Average (mmHg) v Variance (mmHg <sup>A</sup> v Standard deviation (mmHg)	61.59 14.36 159.03 12.61
♥ Maximum (mmHg) ♥ Average (mmHg) ♥ Variance (mmHg) ♥ Standard deviation (mmHg) ♥ Coefficient of variation (%)	61.59 14.36 159.03 12.61 87.79
v Maximum (mmHg) v Average (mmHg) v Vatance (mmHg <sup>3</sup> ) v Standard deviation (mmHg) v Coefficient of valation (%) v Horizontal center (cm)	61.59 14.36 159.03 12.61 87.79 18.50
♥ Maximum (mmHg) ♥ Average (mmHg) ♥ Vatance (mmHg) ♥ Standard deviation (mmHg) ♥ Coefficient of variation (%) ♥ Horizontal center (cm) ♥ Vetical center (cm)	61.59 14.36 159.03 12.61 87.79 18.50 28.52

## Sunmate<sup>®</sup>

The Sunmate<sup>®</sup> cushion has a variable thickness and is made from a viscoelastic foam.

Max Pressure: 65 mmHg





#### Average Pressure: 19 mmHg



11	16	17	39	34	30	5	3	28	25	16	11	1
7	12	19	20	29	19	2	1	22	23	17	10	
2	6	10	16	16	11		Ń.	14	16	12	9	
	2	7	8	7	1			4	7	10	3	2
	4	10	7	7				5	6	5		
	10	11	11	9				5	4	6	3	
	8	12	10	8				8	6	5	5	
	5	6	7	4				10	10	6	6	
	4	5	6	7	4		2	11	14	8	5	

		100.5
▼ Minimum (mmHg)	0.00	1.00
♥ Maximum (mmHg)	64.83	80.6
▼ Average (mmHg)	18.99	-
v Variance (mmHg²)	256.28	
	16.01	60.7
♥ Coefficient of variation (%)	84.29	
♥ Horizontal center (cm)	19.79	40.8
v Vertical center (cm)	28.50	40.0
⊽ Sensing area (cm²)	1239.30	
Regional distribution (%)	100.00	20.9
Comfort index (%)	31.41	

#### Super Contour

The Super Contour is a 3" thick, castellated cushion with a Sunmate<sup>®</sup> base, Pudgee<sup>®</sup> core and RX39 top.

Maximum Pressure: 65 mmHg

Average Pressure: 16 mmHg



		_	7	17	10		7	16	15	9	-		
7	3	9	25	28	36	38	53	29	35	19	10	8	
2	8	11	28	42	60	53	-65	46	44	36	19	13	
4	10	11	20	40	45	45	49	46	47	32	13	8	5
12	17	15	22	47	50	37	44	43	39	25	13	11	10
12	15	17	23	41	40	27	P 34	30	30	23	17	12	8
12	13	13	13	27	23	17	24	29	27	18	12	6	3
11	12	12	12	29	24	10	11	24	31	20	12	6	
5	9	9	15	15	19	6	6	13	25	21	13	6	
	5	4	9	12	12	5	4	13	15	14	9	7	
	3	٠	4	5	4			5	4	7	8	2	
	6	2	6	6	4			5	6	6	4		
	6	12	9	10	8			4	8	3	6	3	
	2	8	12	8	7			4	11	5	4	2	
		4	8	8	4			7	14	12	6	4	
				2				5	8	5	5	2	

		200
		160.
		140.
<b>*</b>		120.
		100
⊽ Minimum (mmHg)	0.00	100.
⊽ Minimum (mil-lig) ⊽ Maximum (mil-lig)	65.26	
▼ Maximum (mmHg)	65.26 16.19	
⊽ Maximum (mmHg) ⊽ Average (mmHg)	65.26 16.19 192.44	80.6
⊽ Maximum (mmHg) ⊽ Average (mmHg) ⊽ Variance (mmHg*) ⊽ Standard deviation (mmHg)	65.26 16.19 192.44 13.87	80.6
⊽ Maximum (mmHg) ⊽ Average (mmHg) ⊽ Variance (mmHg*) ⊽ Standard deviation (mmHg)	65.26 16.19 192.44 13.87 85.69	80.6
	65.26 16.19 192.44 13.87	80.6 60.7
∞ Maximum (mmHg) ∞ Average (mmHg) ∞ Variance (mmHg <sup>2</sup> ) ∞ Sandard devation (mmHg) ∞ Coefficient of variation (%)	65.26 16.19 192.44 13.87 85.69	100. 80.6 60.7 40.8
♥ Maximum (mmHg) ♥ Varance (mmHg) ♥ Varance (mmHg <sup>*</sup> ) ♥ Standard deviation (mmHg) ♥ Coefficient of variation (%) ♥ Horizontal center (cm)	65 26 16.19 192.44 13.87 85 69 18.88	80.6 60.7
♥ Maximum (mmHg) ♥ Average (mmHg) ♥ Variance (mmHg?) ♥ Standard deviation (mmHg) ♥ Coefficient of variation (%) ♥ Horizontal center (cm) ♥ Vetical center (cm)	65.25 16.19 192.44 13.87 85.69 18.88 28.43	80.6 60.7



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