

Table S1 Dates over which data was collected. The time period(s) and number of samples for each day are also shown.

Dates	Times	No. of samples
6 January 2015	1023 - 1105 and 1324 - 1444	38
15 January 2015	1243 - 1359	12
16 January 2015	0947 and 1407	2
17 January 2015	1326 - 1334	4
18 January 2015	1042 - 1114	3
22 January 2015	1459 - 1551	8
23 January 2015	1017 - 1101 and 1322 - 1326	10
24 January 2015	1350 - 1604	14
29 January 2015	1522 - 1535	3

Table S2 Definitions of locomotor and postural modes recorded, modified or taken from Hunt et al. (1996) ie. "L9a" refers to L9a locomotor mode from Hunt et al. (1996).

Locomotor mode	Definition
Brachiate	L9a
Unimanual swing across	L9d
Bimanual swing across	Both forelimbs grasp a mobile vertical support to swing across, body remains orthograde
Brachiating richochetal	L9b
Bipedal walk (w/o) assistance	L3a
Bimanual pull-up	L8f

Leap	L12c
Drop	L13c - h
Vertical scramble	L8c
Orthograde transfer	L9f
Shuffle	Similar to L3b, with extreme flexion of hip and knee
Orthograde suspension	L9g
Unimanual swing up	Similar to “unimanual swing across” but upwards
Unimanual swing down	Similar to “unimanual swing across” but downwards
Bipedal squat walk	As in L3b but with hindlimbs fully flexed
Ladder climb	L8b
	Swinging back and forth on a support, often all four limbs
X Swing	are grasping support simultaneously. Body can be orthograde or pronograde.
Vertical climb	L8a
Bipedal run	L7
Bridge	L11a
Bimanual forelimb swing up	Similar to “bimanual swing across” but upwards
Vertical descend	L8g
Pronograde suspension	L10
Bimanual swing down	Similar to “bimanual swing across” but downwards
Lunge	L11c
Brachiating leap	L9c
Unimanual pull up	Similar to “bimanual pull up” but with one forelimb
Bipedal leap up	Similar to “leap”, with one hindlimb pushing off support,

and other hindlimb landing on support

Posture	
Sit	P1 and P2
Orthograde suspension	P8 except P8c and P8d
Bipedal stand (assisted)	P5b - c
Pronograde suspension	P10
Bipedal stand	P5a
Forelimb-suspend/sit-ortho	P8c
Forelimb-suspend/squat-ortho	P8d

Table S3 Percentage of each positional mode displayed.

Locomotor Mode	%	Locomotor Mode (continued)	%
Brachiate	24.7	Pronograde suspension	0.6
Unimanual swing across	18.7	Pull up	0.6
Bipedal walk	8.5	Bimanual swing down	0.6
Bimanual swing across	7.1	Lunge	0.4
Brachiating ricochet al	5.8	Brachiating leap	0.4
Bimanual pull-up	4.8	Unimanual pull up	0.2
Leap	3.5	Bipedal leap up	0.2
Drop	3.1		
Vertical scramble	3.1		
Orthograde transfer	2.7		
Shuffle	2.1		
Orthograde suspension	1.9	Posture	%
Unimanual swing up	1.9	Sit	66.2

Unimanual swing down	1.5	Orthograde suspension	23.8
Bipedal squat walk	1.2	Assisted bipedal stand	3
Ladder climb	1.2	Pronograde suspension	2.6
X Swing	1	Bipedal stand	2.2
Vertical climb	0.8	Forelimb-suspend/sit - orthograde	1.3
Bi run	0.8	Orthograde suspension	0.4
Bridge	0.8	Forelimb-suspend/squat - orthograde	0.4
Bimanual forelimb swing up	0.8	Sit	66.2
Vertical descend	0.6	Orthograde suspension	23.8

Table S4 Percentages of the most commonly used *initial* and *terminal* supports during the five most frequently displayed locomotor modes.

Locomotor mode	<i>Initial support</i>	%	<i>Terminal support</i>	%
Brachiation	Outside mesh	52.3	Outside mesh	44.1
	D15 horizontal log	6.5	D15 horizontal log	4.5
	C9 horizontal log	3.2	D22 vertical rope	4
	D27 vertical rope	3.2	C15 horizontal log	3.4
	D38 vertical rope	3.2	C16 horizontal log	3.4
	C41 vertical rope	2.6	D27 vertical rope	3.4
	D8 horizontal log	2.6	D30 vertical rope	3.4
	D22 vertical rope	2.6	C1 corner ledge	2.8
	D29 vertical rope	2.6	C32 vertical rope	2.8
	D30 vertical rope	2.6	D17 horizontal log	2.8
Unimanual swing across	Outside mesh	11.5	Outside mesh	16.3
	D22 vertical rope	9.9	D11 horizontal log	7.1
	C10 horizontal log	7.6	D22 vertical rope	6.3

	D30 vertical rope	7.6	C8 horizontal log	5.4
	C9 horizontal log	6.1	D37 Ledge	5.4
	D21 vertical rope	6.1	C29 horizontal rope	5
	C8 horizontal log	5.3	D7 horizontal log	4.6
	C32 vertical rope	4.6	C9 horizontal log	4.2
	D17 horizontal log	3.8	C10 horizontal log	4.2
	C29 horizontal rope	3.1	D38 vertical rope	3.8
Bimanual swing across	Outside mesh	21.8	Outside mesh	23.7
	D22 vertical rope	17.9	C9 horizontal log	8.6
	C32 vertical rope	11.5	C32 vertical rope	6.5
	C33 vertical rope	7.7	C33 vertical rope	5.4
	D30 vertical rope	7.7	D8 horizontal log	5.4
	C31 vertical rope	6.4	D7 horizontal log	4.3
	C42 vertical rope	3.8	D10 horizontal log	4.3
	C1 corner ledge	2.6	D11 horizontal log	4.3
	C27 vertical rope	2.6	D22 vertical rope	4.3
	C28 vertical rope	2.6	C2 corner ledge	3.2
Richochetal brachiation	D11 horizontal log	25	D11 horizontal log	15
	D22 vertical rope	11.1	C32 vertical rope	10
	Outside mesh	11.1	D27 vertical rope	10
	D12 horizontal log	8.3	D30 vertical rope	10
	D15 horizontal log	8.3	C23 horizontal log	7.5
	D28: vertical rope	8.3	D12: horizontal log	7.5
	C11: horizontal log	5.6	D15: horizontal log	7.5
	C8: horizontal log	2.8	Outside mesh	7.5

	C9: horizontal log	2.8		
Bipedal walk	C44 Floor	40	C44 Floor	60
	C9 horizontal log	20	C32 vertical rope	20
	C11 horizontal log	20	C9 horizontal log	10
	C32 vertical rope	20	C10 horizontal log	10

Table S5 Percentages of the most commonly used supports during the most frequently displayed postural mode: “sit”.

Sit	%
C44 Floor	19.9
C45 Shelf	8.7
Outside mesh	8.7
D11 horizontal log	7.6
D1 Corner ledge	7
D8 horizontal log	5.2
C1 Corner ledge	4.9
C8 horizontal log	3.8
D7 horizontal log	3.8
D22 vertical rope	3.4

Figure S1 Lidar model of part of enclosure



Figure S2 Areas of minimum and maximum support usage for *initial* (A) and *terminal* (B) supports in C. Dark red refers to high usage, light and white colours to intermediate usage, and dark blue to low usage. Each area is labelled with its code (eg. CC1d) followed by the frequency of use as a percentage.

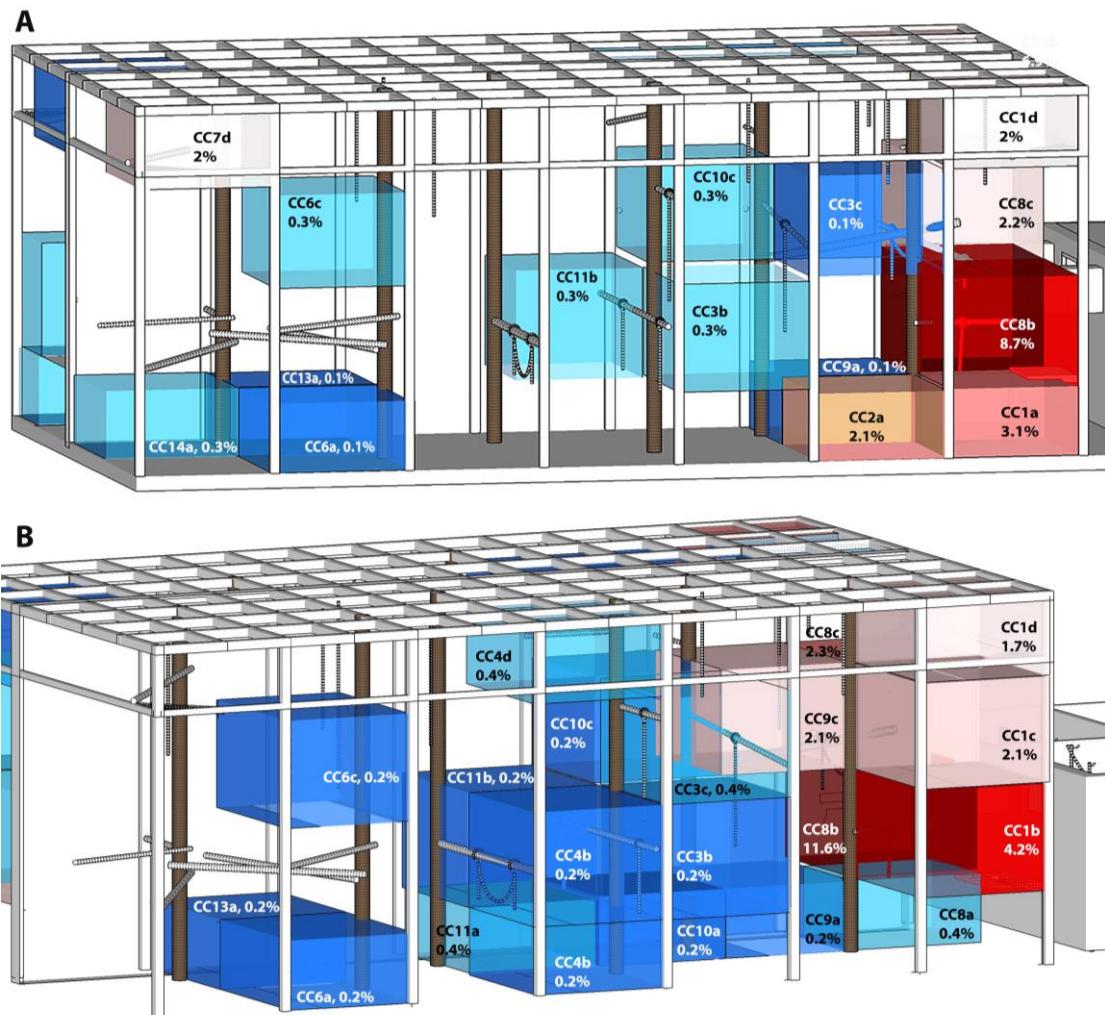


Figure S3 Areas of minimum and maximum support usage for *initial* (A) and *terminal* (B) supports in D. Dark red refers to high usage, light and white colours to intermediate usage, and dark blue to low usage. Each area is labelled with its code (eg. DD1b) followed by the frequency of use as a percentage.

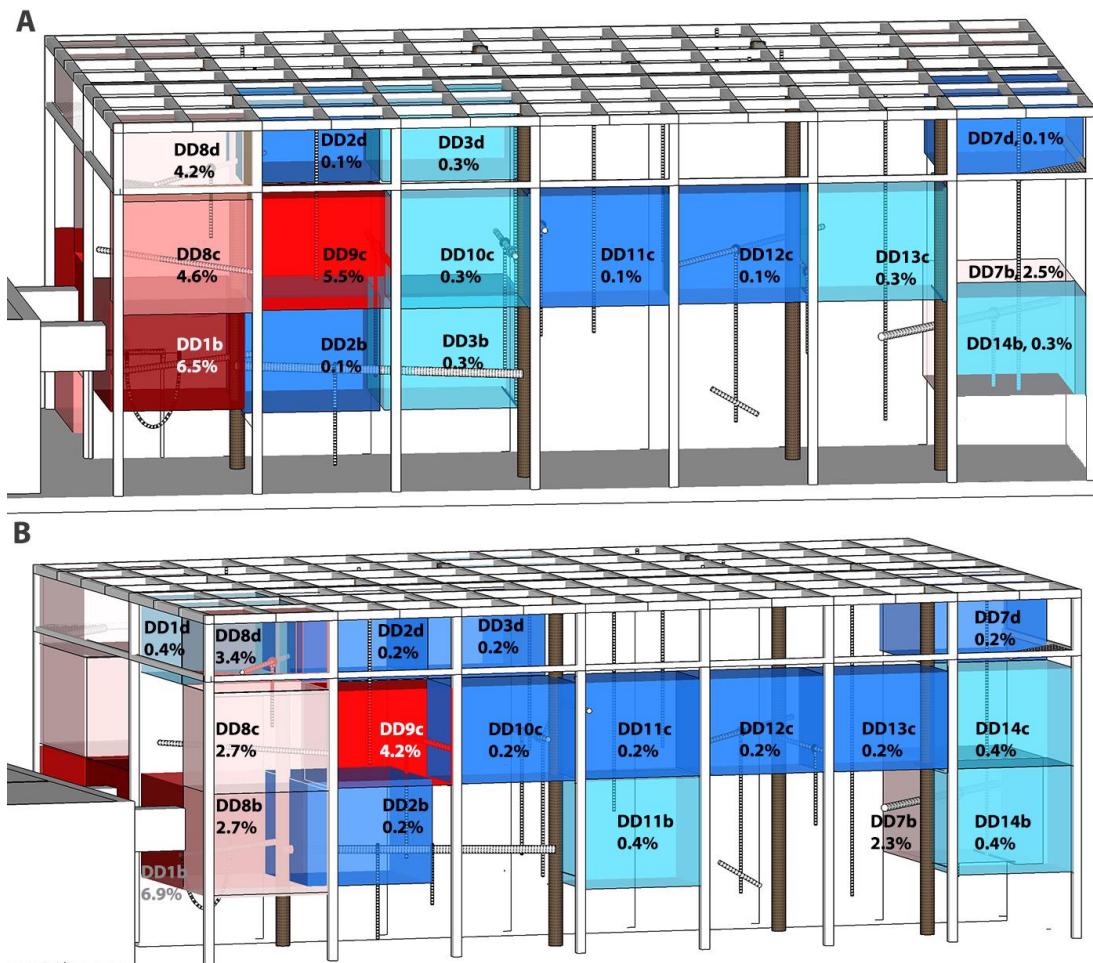


Figure S4 Percentages of behaviour types displayed. Behaviour was recorded at the start of each positional event.

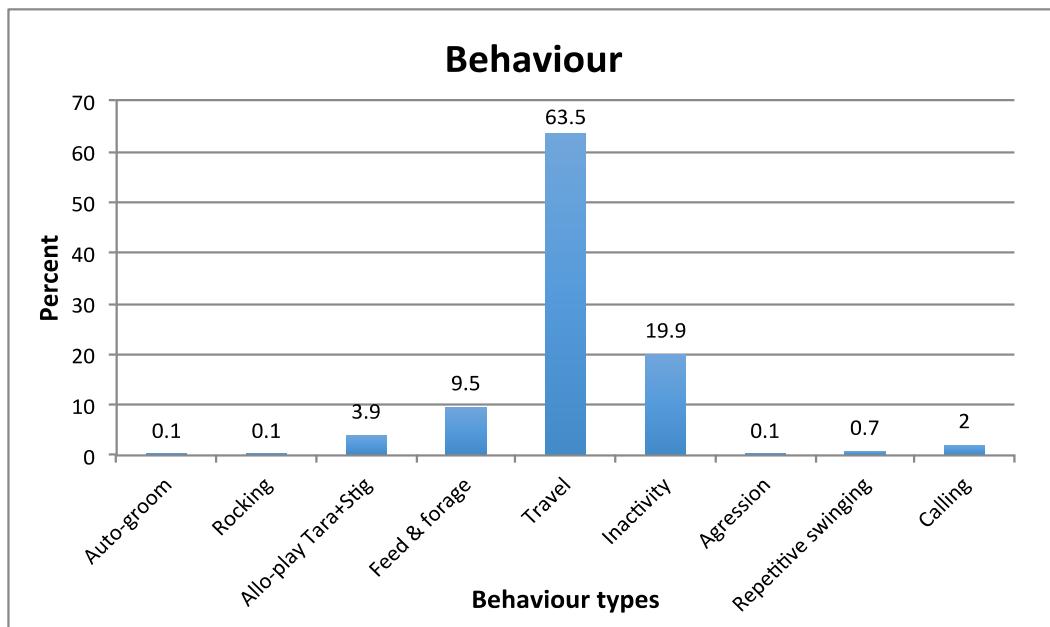


Figure S5 Percentage of each height category used, where height was recorded for each bout of positional behaviour.

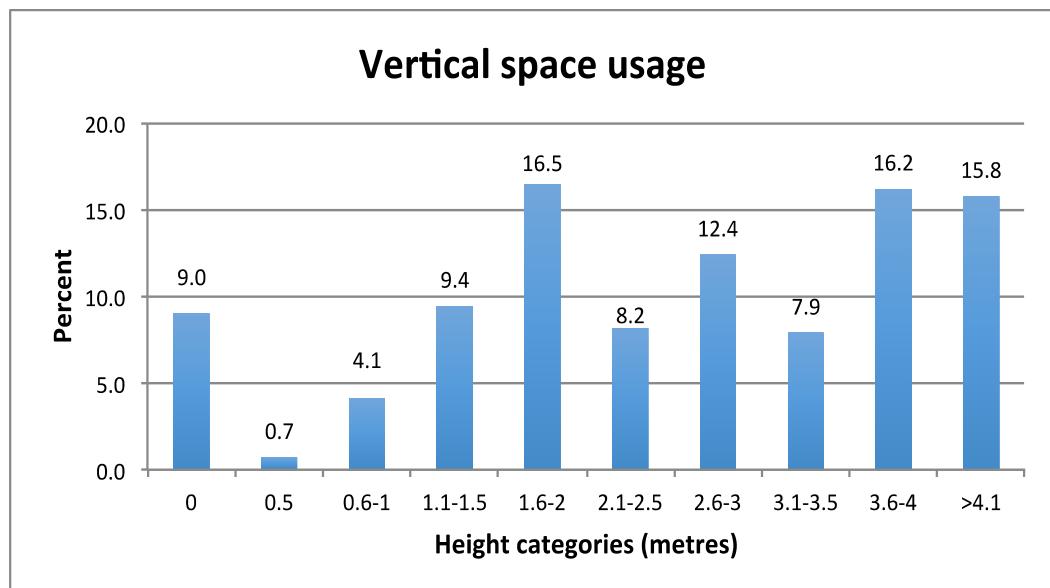


Figure S6 Areas used for “feed & forage” at C (A top figure) and D (B bottom figure). Dark red refers to high usage, light and white colours to intermediate usage, and dark blue to low usage. Each area is labelled with its code (eg. CC13a) followed by the frequency of use as a percentage.



Figure S7 Supports used most (red) and least (blue) during “feed & forage”. Each support is labelled with the support code (eg. C31) followed by electivity index (eg. -1).

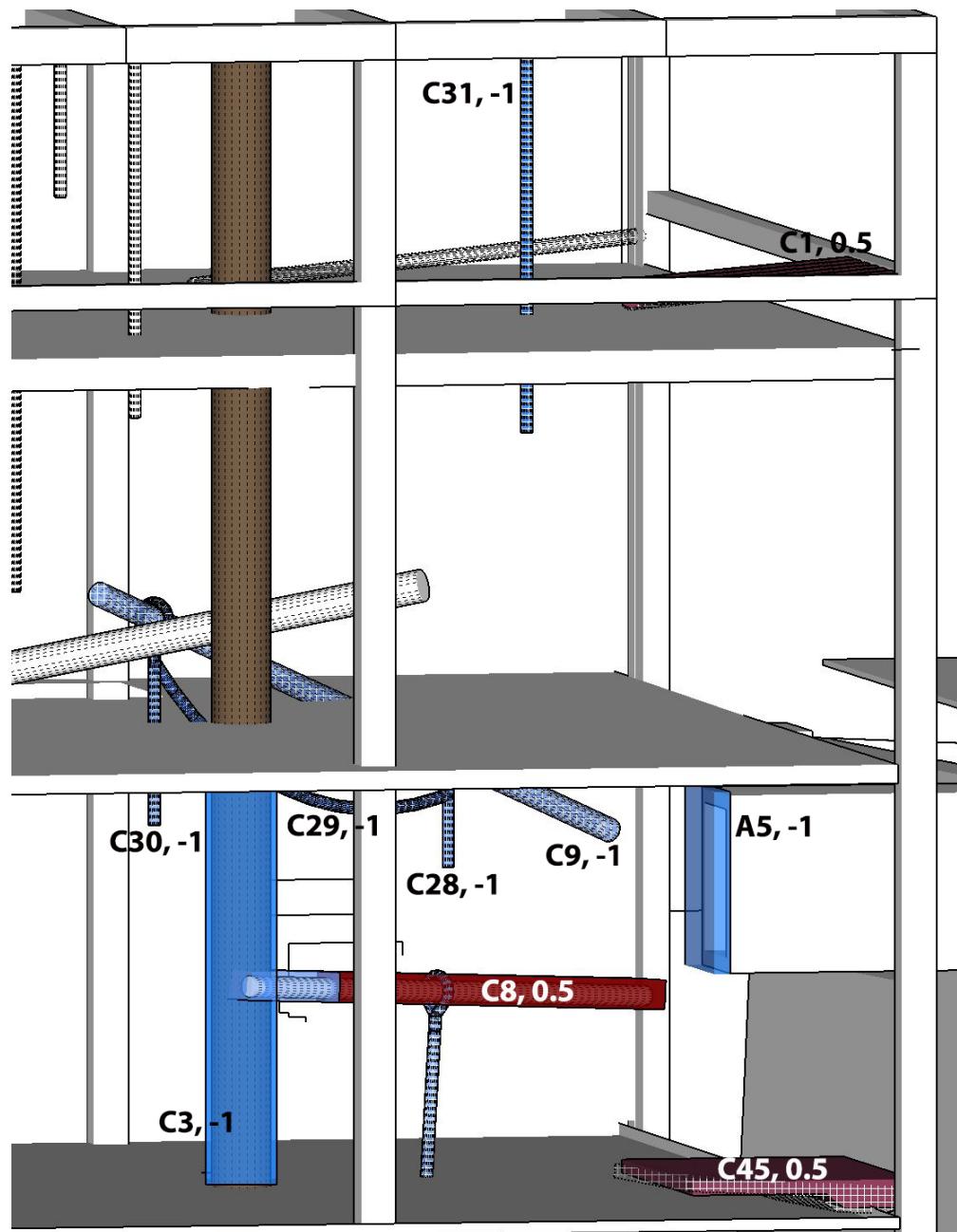


Figure S8 Areas used during “inactivity” at C (A top figure) and D (B bottom figure). Dark red indicates to high usage, light and white colours to intermediate usage, and dark blue to low usage. Each area is labelled with its code (eg. CC13d) followed by the frequency of use as a percentage.

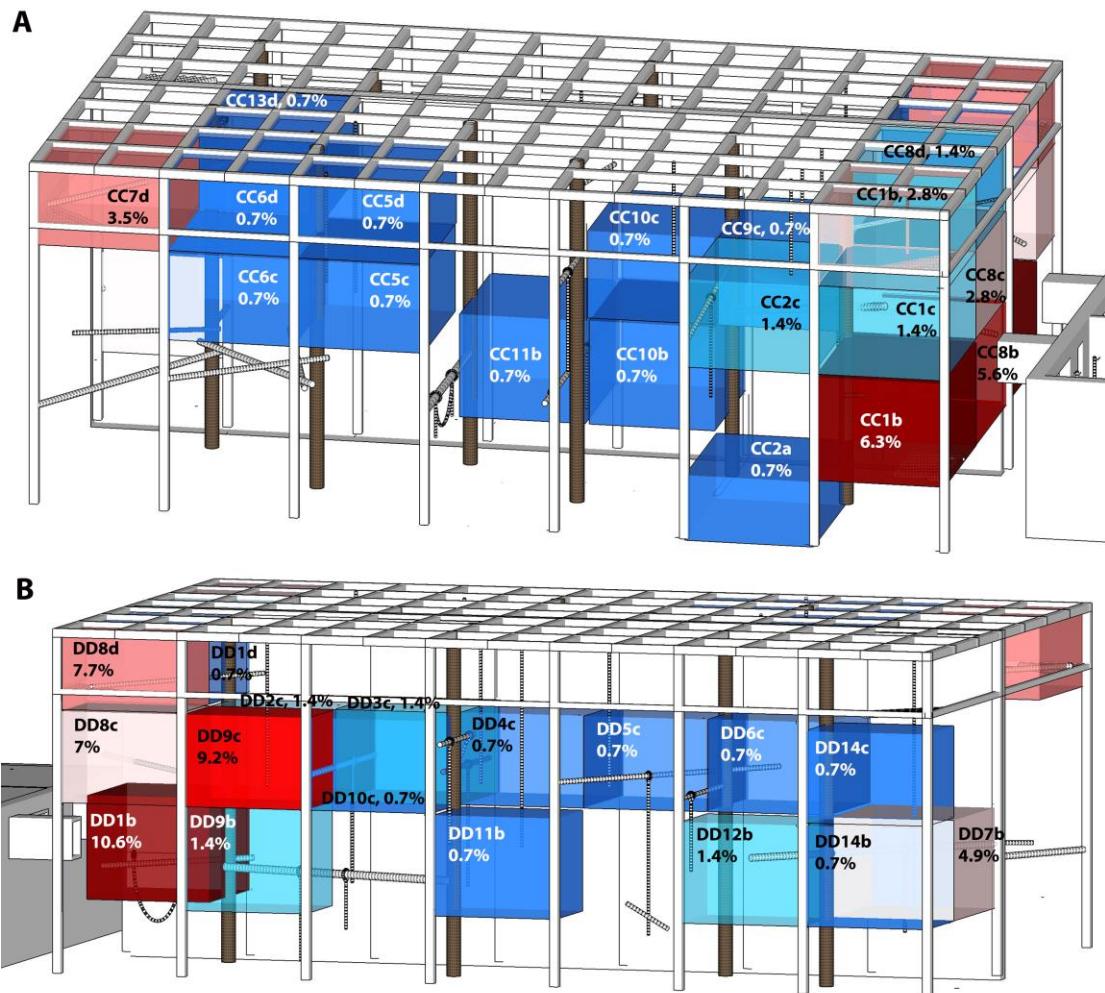


Figure S9 Supports used most (red) and least (blue) during “inactivity”. Each support is labelled with the support code (eg. D4) followed by electivity index (eg. -1).

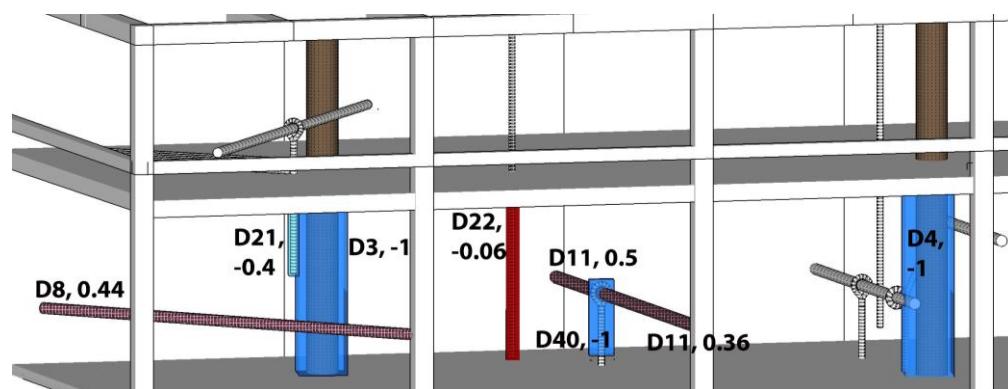


Figure S10 Supports used most during “brachiation”. Each support is labelled with the support code (eg. C1) followed by percentage of use.

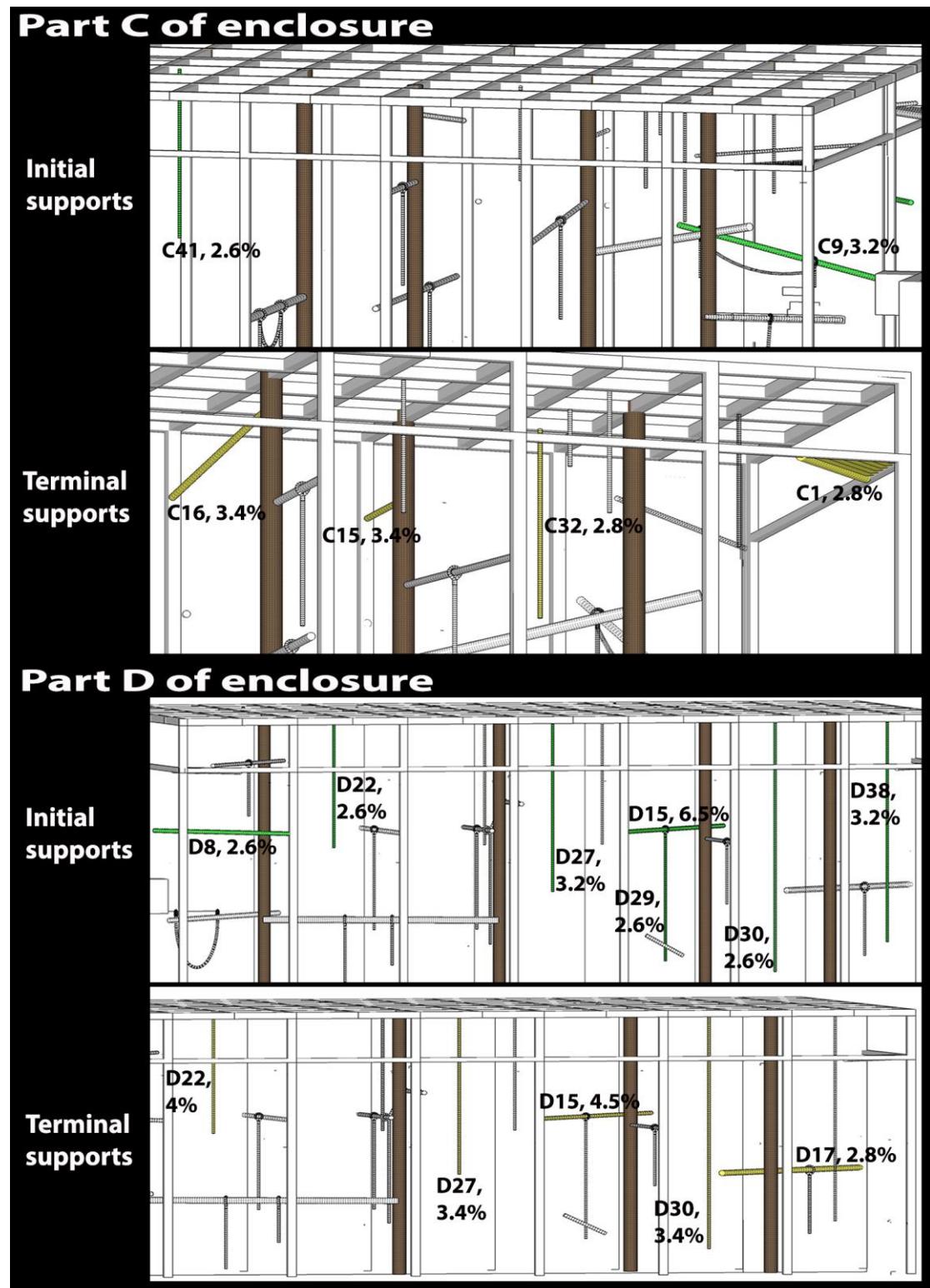


Figure S11 Supports used most during “bipedal walk”. Each support is labelled with the support code (eg. C1) followed by percentage of use.

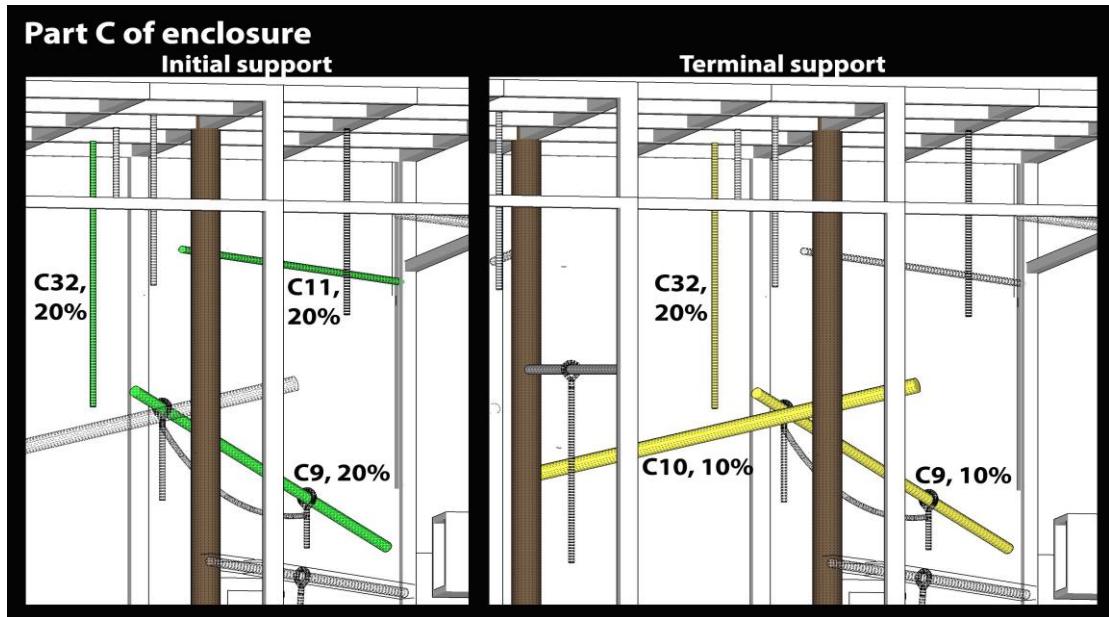


Figure S12 Supports used most during “richochetal brachiation”. Each support is labelled with the support code (eg. C1) followed by percentage of use.

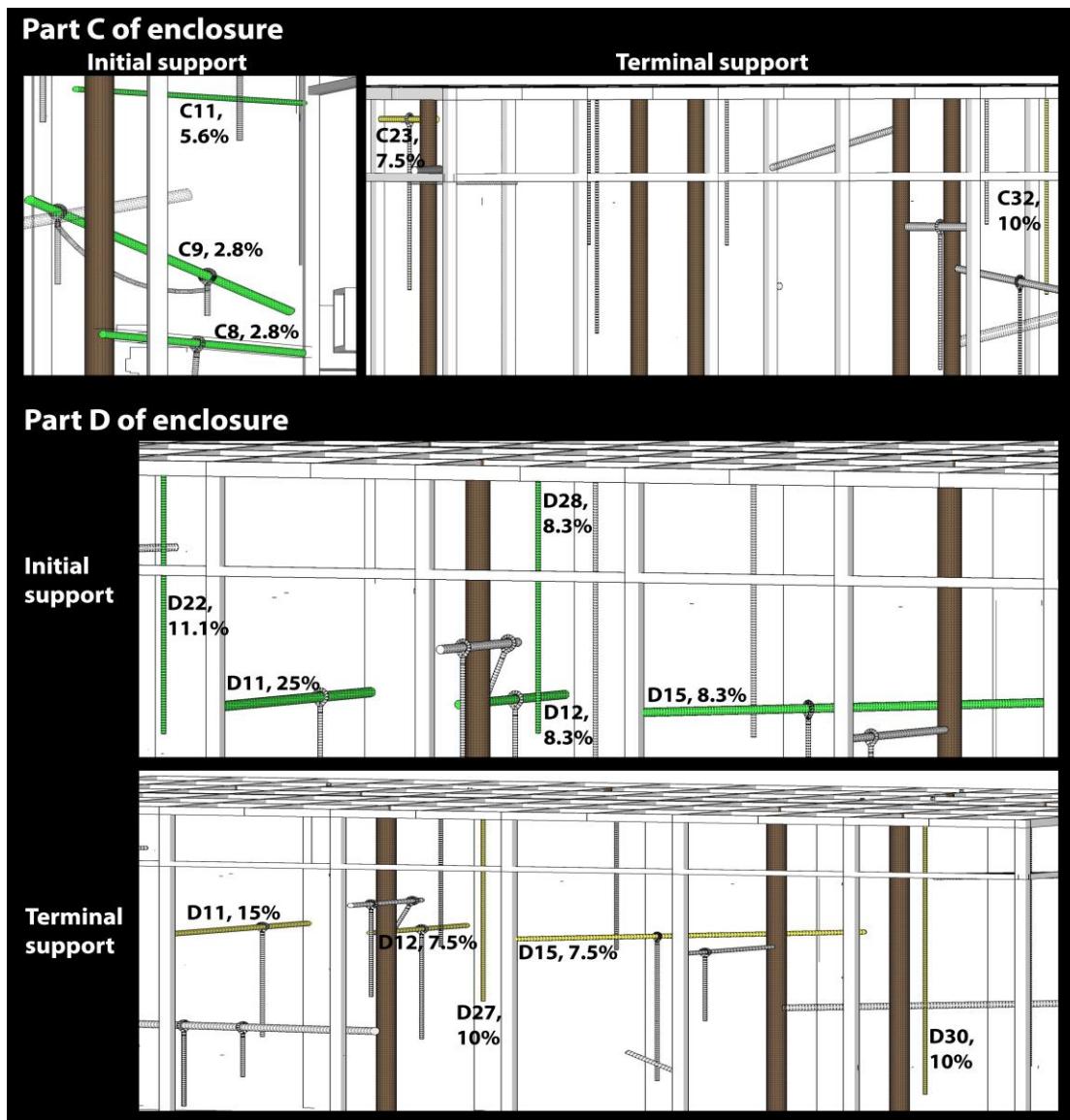


Figure S13 Supports used most during “sit”. Each support is labelled with the support code (eg. C1) followed by percentage of use.

