

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 ricochetal | 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 |
| X Swing | Swinging back and forth on a support, often all four limbs 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 | 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 |
| | 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 |
| Bimanual swing | D30 vertical rope | 7.7 | D8 horizontal log | 5.4 |
| across | 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 |
| | 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 |
| Richochetal | D12 horizontal log | 8.3 | D30 vertical rope | 10 |
| brachiation | 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.

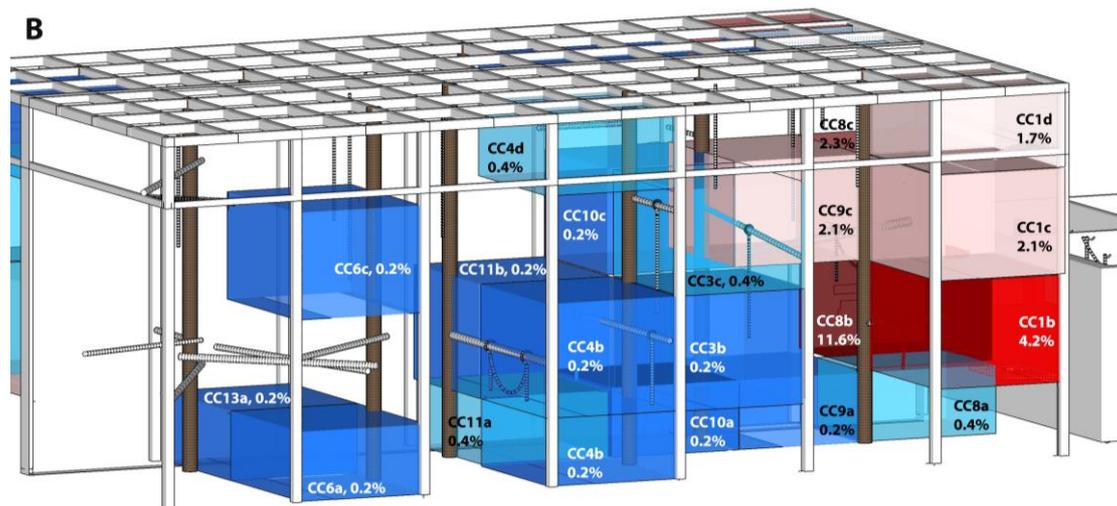
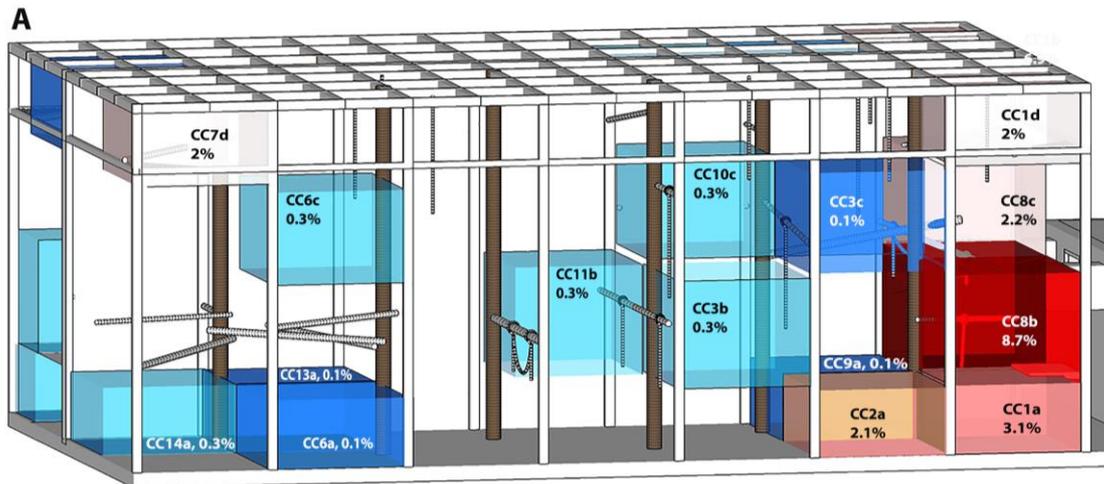


Figure S3 Areas of minimum and maximum support usage for *initial* (A) and *terminal* (B) supports in D. Dark red refers to high usage, light and white colours to intermediate usage, and dark blue to low usage. Each area is labelled with its code (eg. DD1b) followed by the frequency of use as a percentage.

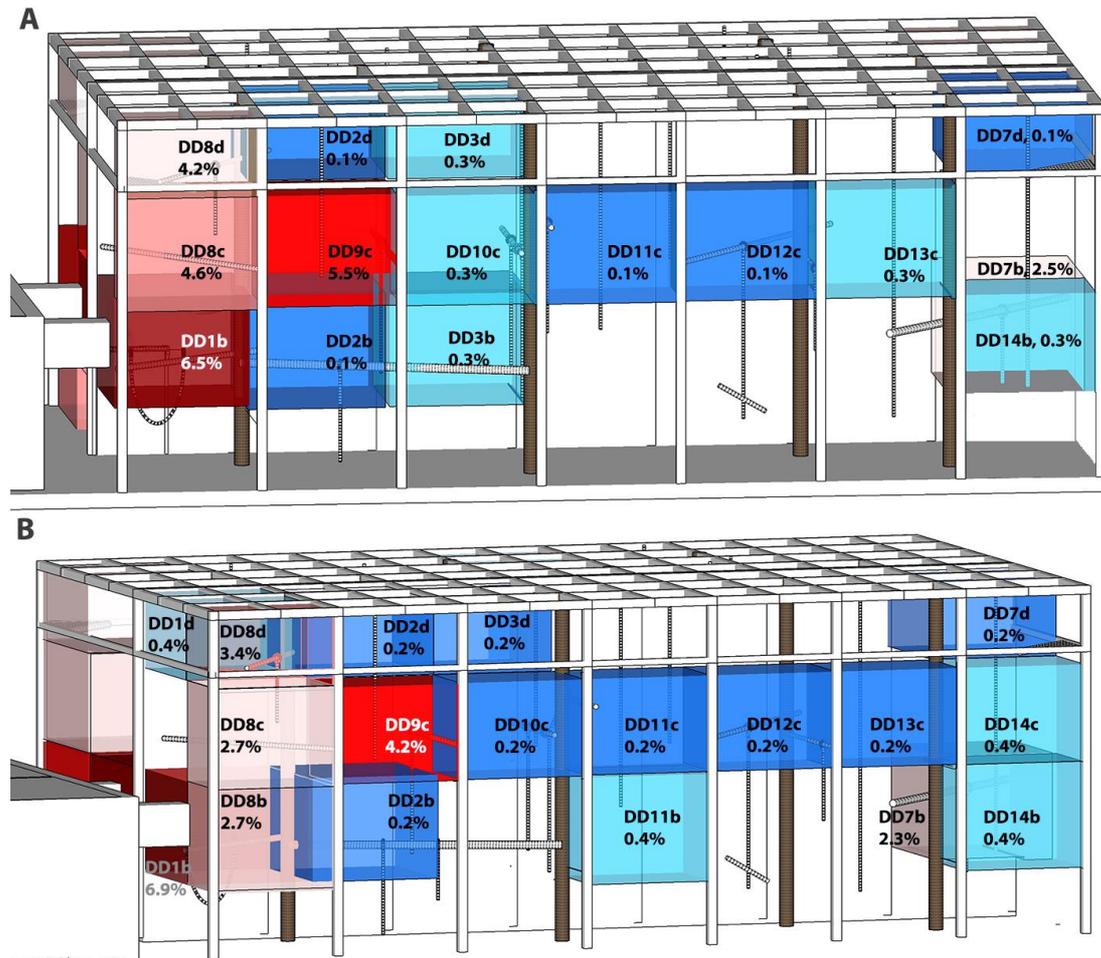


Figure S4 Percentages of behaviour types displayed. Behaviour was recorded at the start of each positional event.

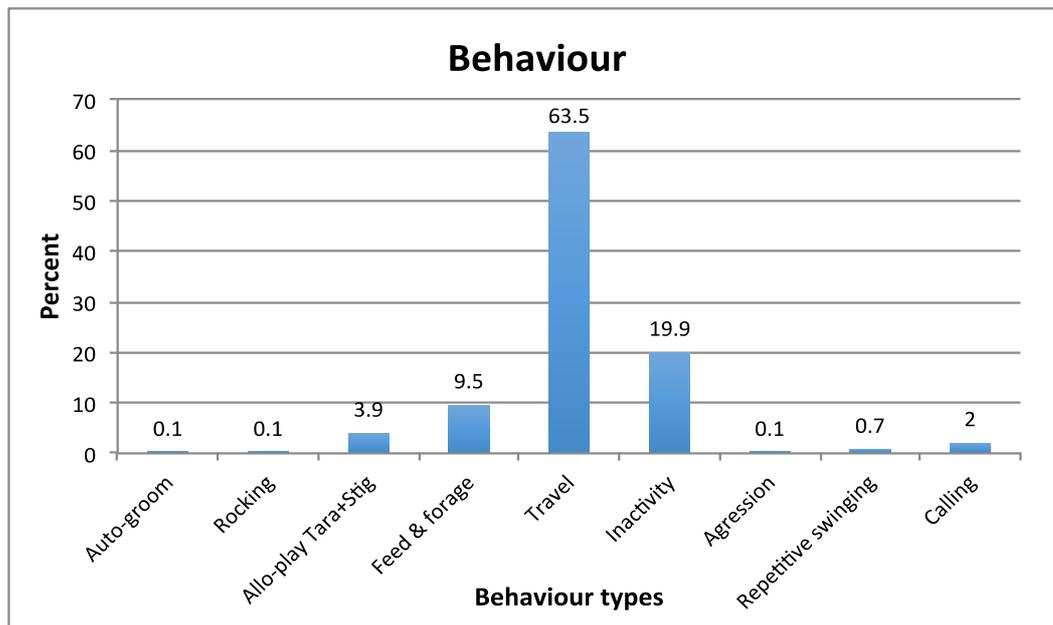


Figure S5 Percentage of each height category used, where height was recorded for each bout of positional behaviour.

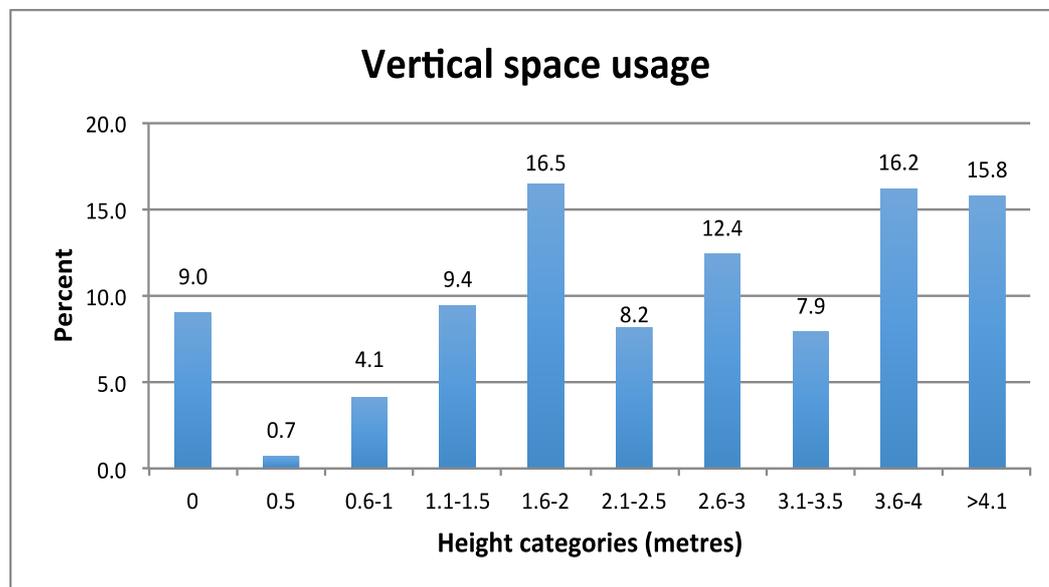


Figure S6 Areas used for “feed & forage” at C (A top figure) and D (B bottom figure). Dark red refers to high usage, light and white colours to intermediate usage, and dark blue to low usage. Each area is labelled with its code (eg. CC13a) followed by the frequency of use as a percentage.

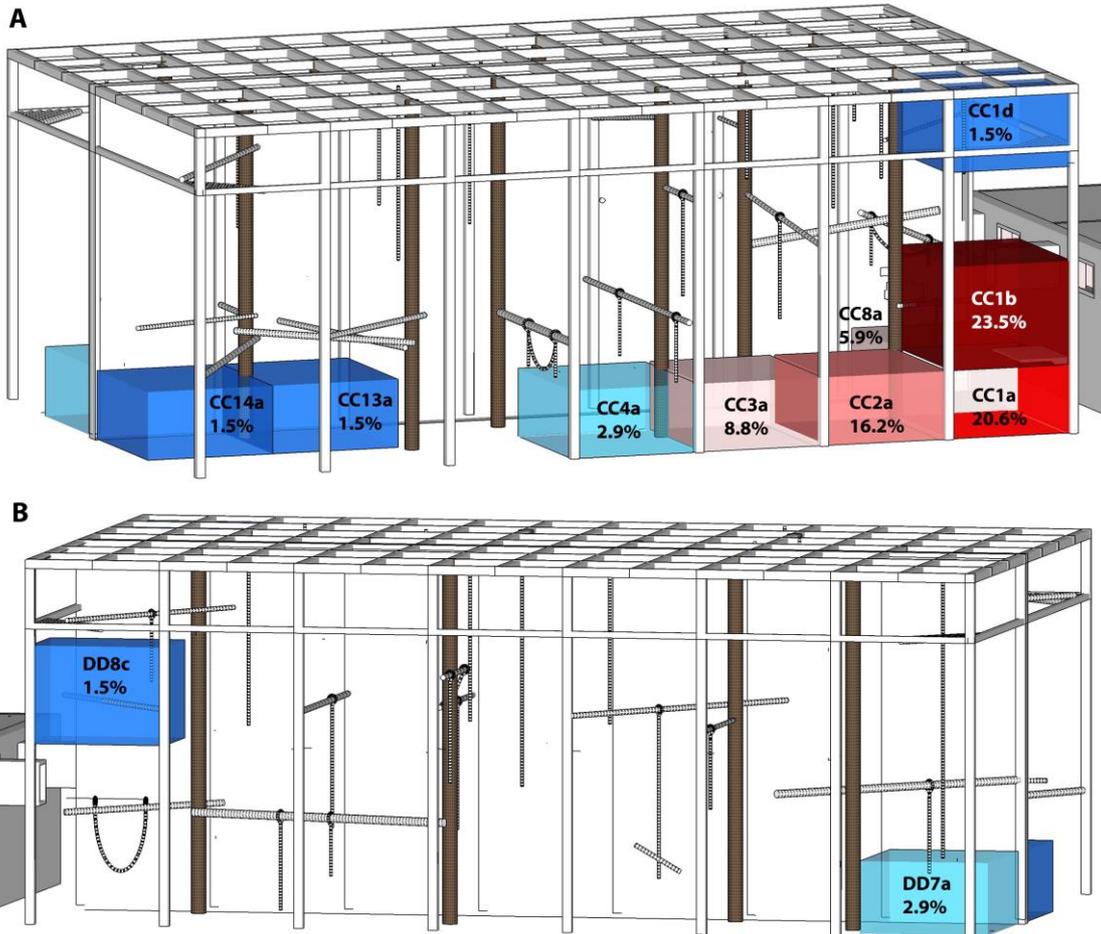


Figure S7 Supports used most (red) and least (blue) during “feed & forage”. Each support is labelled with the support code (eg. C31) followed by electivity index (eg. -1).

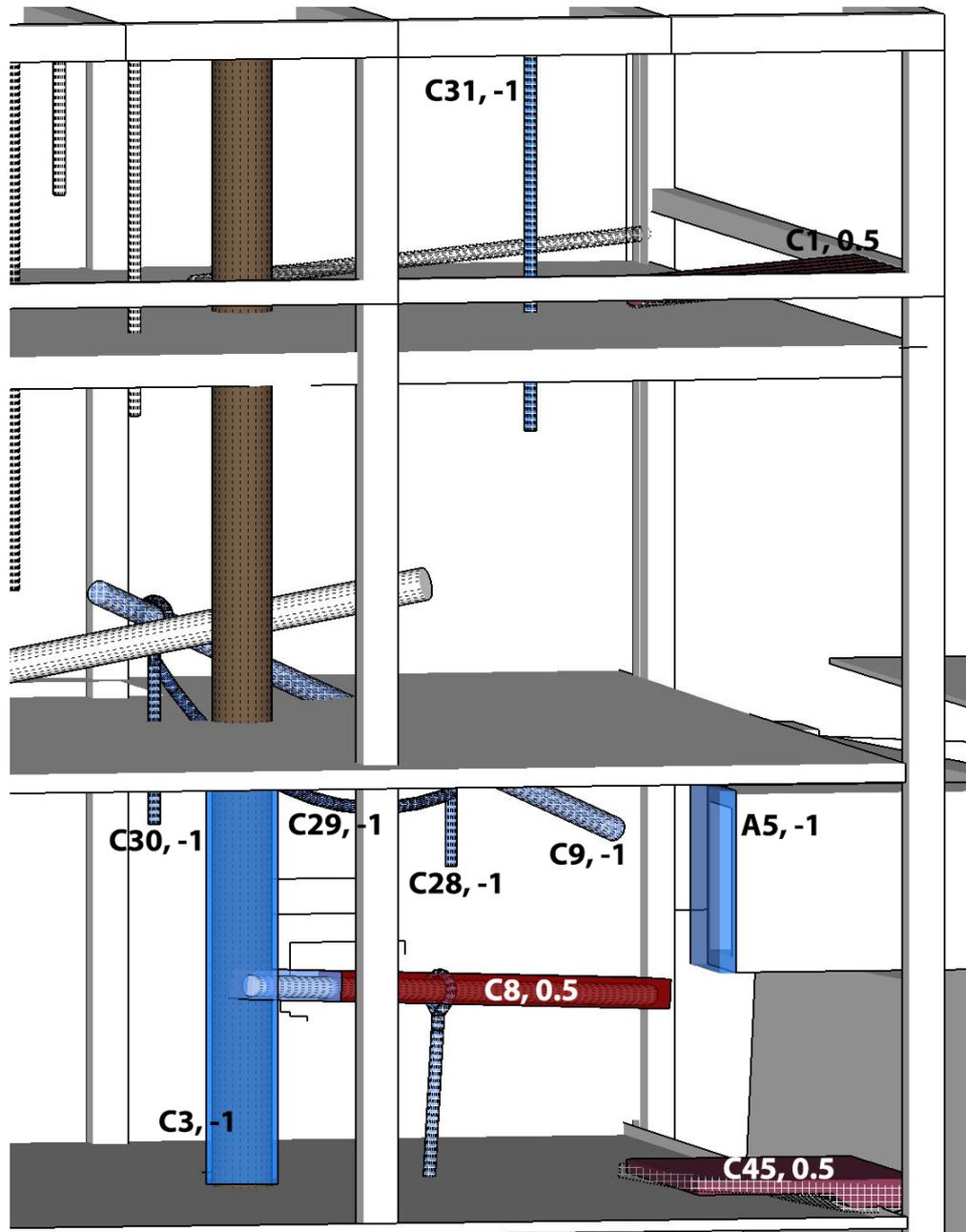


Figure S8 Areas used during “inactivity” at C (A top figure) and D (B bottom figure). Dark red indicates to high usage, light and white colours to intermediate usage, and dark blue to low usage. Each area is labelled with its code (eg. CC13d) followed by the frequency of use as a percentage.

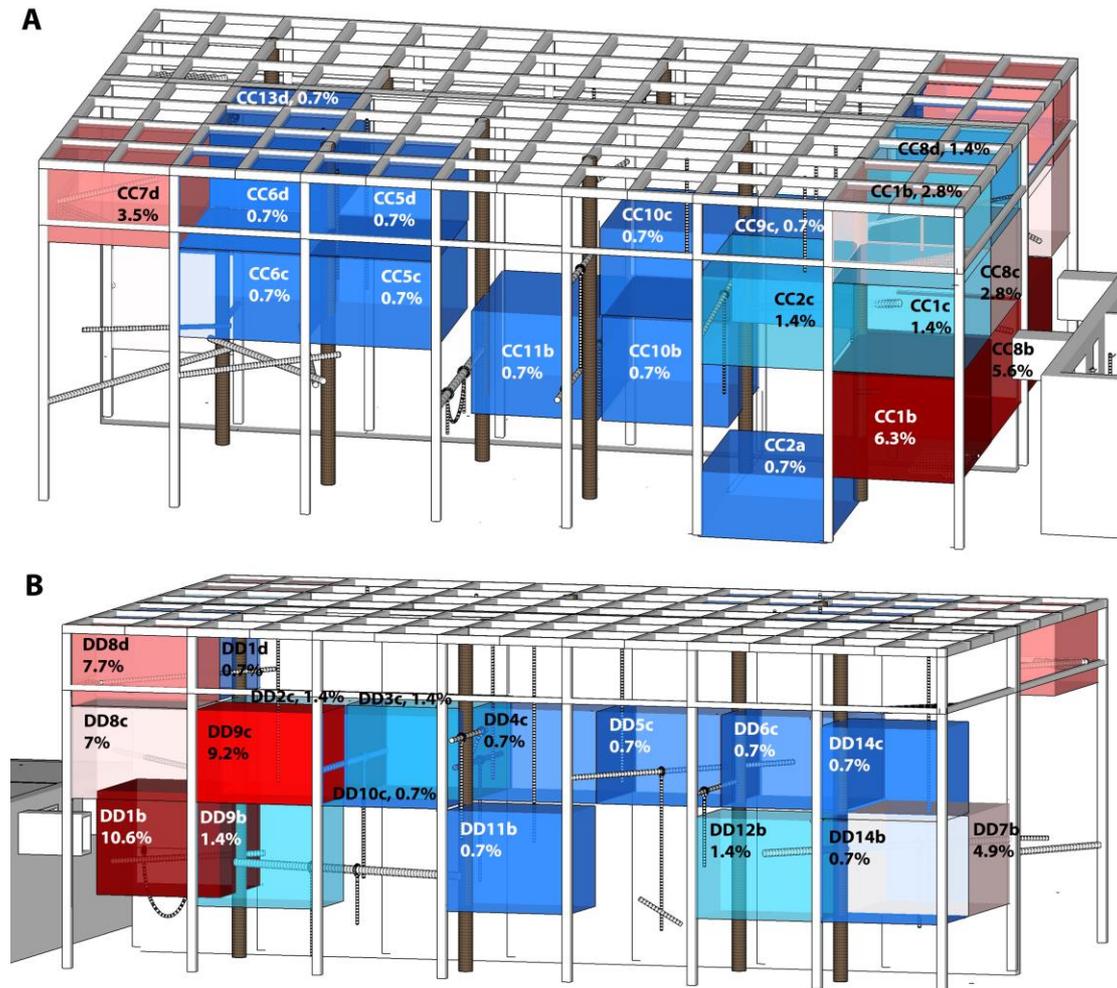


Figure S9 Supports used most (red) and least (blue) during “inactivity”. Each support is labelled with the support code (eg. D4) followed by electivity index (eg. -1).

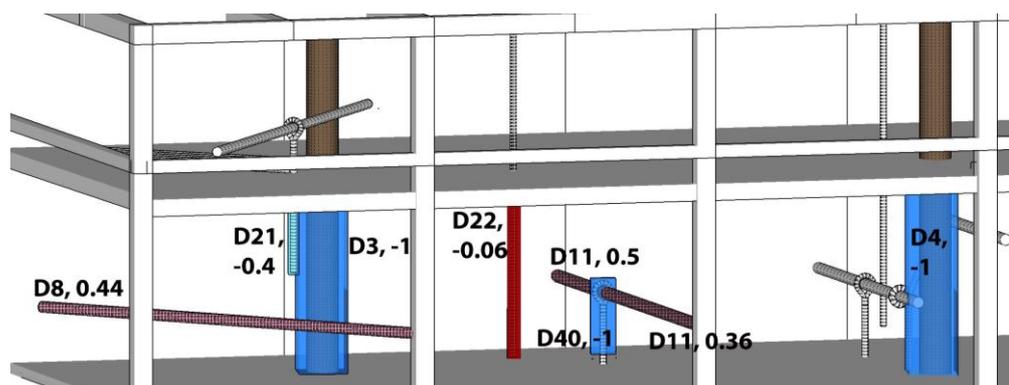


Figure S10 Supports used most during “brachiation”. Each support is labelled with the support code (eg. C1) followed by percentage of use.

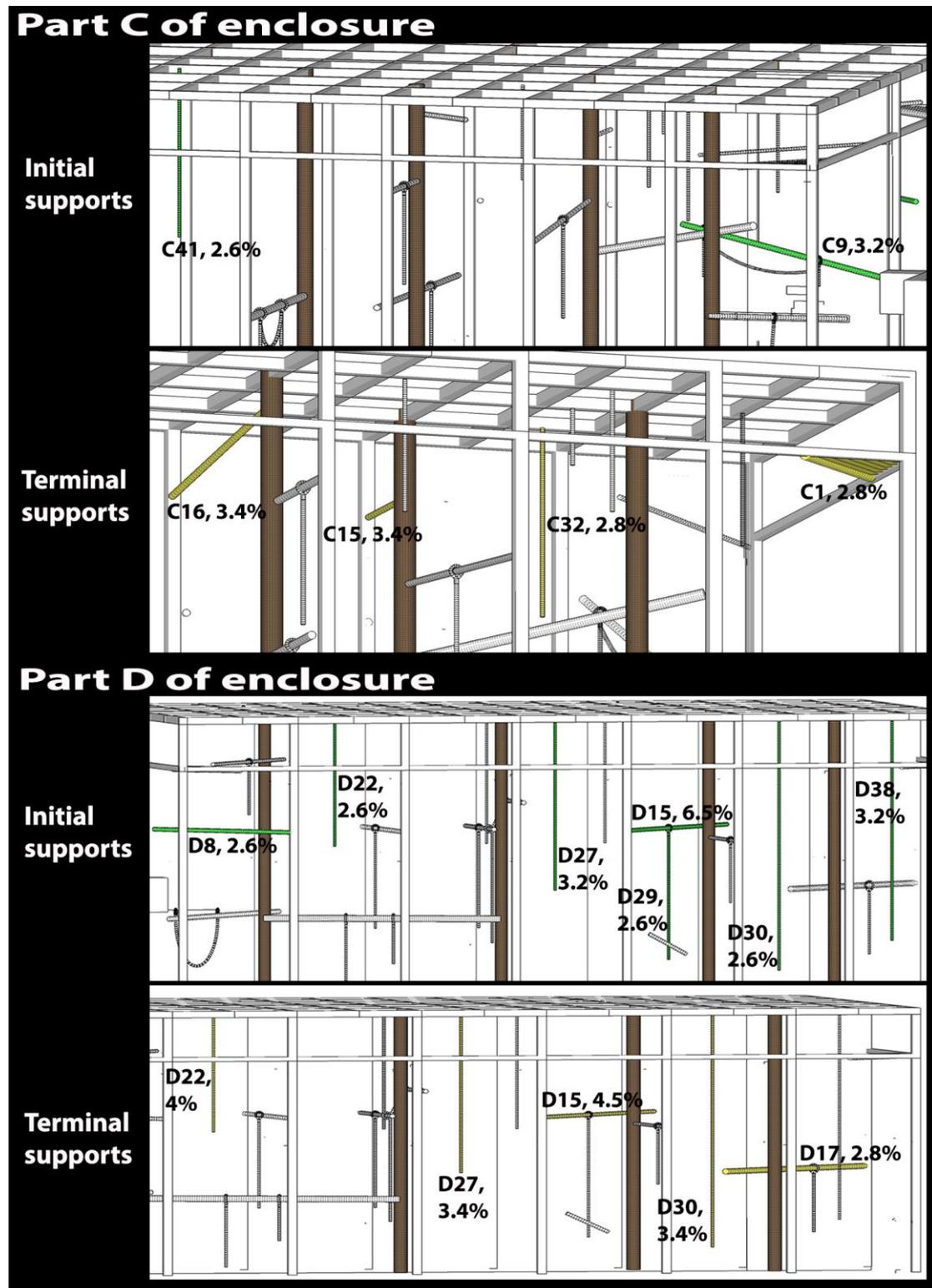


Figure S11 Supports used most during “bipedal walk”. Each support is labelled with the support code (eg. C1) followed by percentage of use.

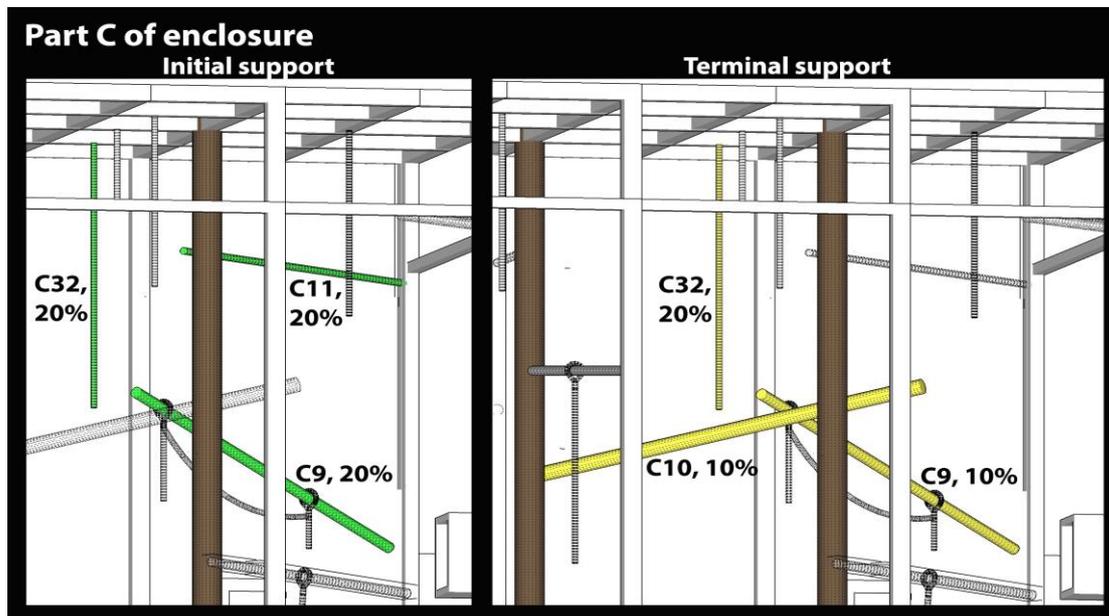


Figure S12 Supports used most during “richochetal brachiation”. Each support is labelled with the support code (eg. C1) followed by percentage of use.

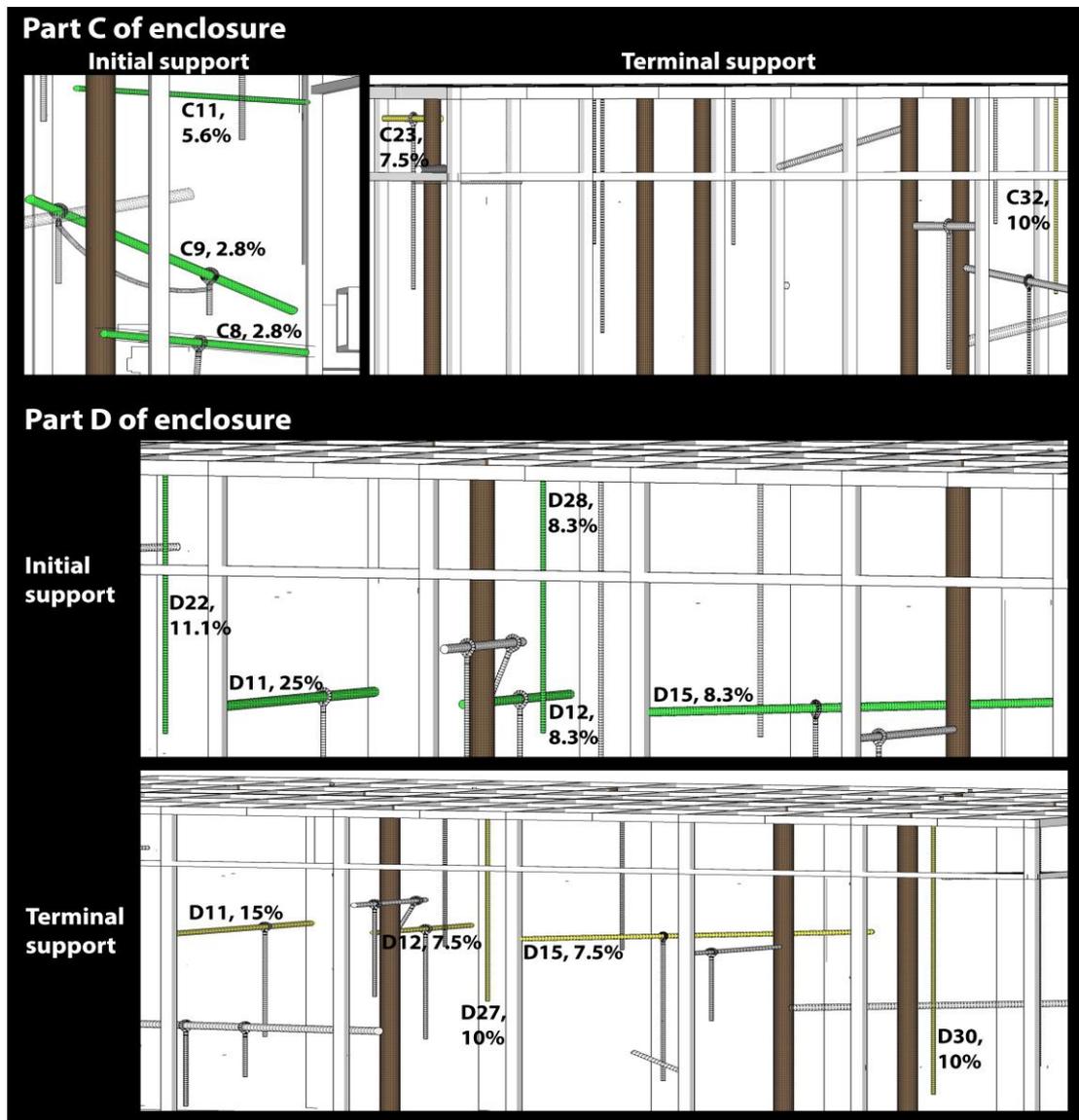


Figure S13 Supports used most during “sit”. Each support is labelled with the support code (eg. C1) followed by percentage of use.

