

## ERGONOMIC ASSESSMENT

### **Buro Tidal Mesh Back Chair**

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#### **Seat Profile – 9 (10)**

A generously proportioned seat 490mm deep by 530mm wide. It is a generous medium density foam peaking at about 90mm at the back and sides. It has a moulded, well-designed seat with a depression of 30mm in the rear sitting area, and 20mm either side for thigh position, with a central raised mound in the region between the thighs. It gives the effect of providing excellent comfort and support while reducing contact pressure. The large surface area of contact and the central raised portion encourage forward tilt postures without sliding forward. A very comfortable seat.

#### **Back Rest Profile – 18 (20)**

The mesh back is quite high and wide at 680mm and 500mm respectively. It is rectangular in shape with rounded corners and a gently curved top. The mesh is quite tightly stretched over a metal frame. There is a pronounced lumbar support with about 50mm of curve peaking at 150mm above the base. It then gently reclines to the top of the chair. The wide back support has significant lateral support coming out about 50mm from the centre. It provides excellent support without being obtrusive. It is reinforced by a plastic frame, covered with foam, lumbar support about 110mm high which echoes the profile of the mesh. It provides additional support and stability without being obtrusive. The relationship of the backrest with the seat is very good.

#### **Configuration of seat and backrest**

##### **Forward tilt - 9 (10)**

There is a substantial range of forward tilt available for +6 degrees, which when combined with the seat profile and the well upholstered seat provides and encourages an excellent and very comfortable forward tilt sitting posture.

##### **Centre- 9 (10)**

The centre position with horizontal thighs is comfortable and supportive without any pressure points on the seat.

##### **Reclined - 8 (10)**

Although the seat reclines by up to 10 degrees there is limited additional backrest reclination. The reclined postures are somewhat limited though they are comfortable without any pressure points. The high back comes into its own with the reclined postures providing comfortable support for the full length of the spine.

#### **Ease of adjustability – 18 (20)**

There are 3 levers on the right-hand side for seat height, seat tilt, and back rest tilt. They are marked but they are difficult to see from the seated position and when locked they are awkward to reach – just beyond arms reach. There is a tension adjustment mechanism for the seat tilt located underneath the seat which allows the tilt to be left in free flow and adjusted to body weight. It is a little awkward to use and requires getting off the chair. The gas lift height adjustment will suit a wide range of users.

The backrest height is easily adjustable reaching back with both hands while seated and using the 4 stage click/clack mechanism. There is also additional lumbar support which can easily be adjusted from the seated position.

On the left side there is a lever that provides a very easy-to-operate seat slider. With the current configuration it further reduces the access to effective pelvic and lumbar support.

The arms provided with the chair are vertically orientated from the side of the seat. They are 25cm long and 8cm wide with a flat top and a gentle curve from front to back. They are adjustable for height using a button on the outside, with a range of 6cm. They are adjustable for width using the locking mechanism under the seat. They do not interfere with the desk surface when working.

#### **Anthropometric range – 18.5 (20)**

The seat and back rest are a good size with generous proportions and a good configuration and will suit a wide range of users. The seat slider will assist the taller user.

#### **Total 89.5 (100)**

##### **Summary**

The seat and back rest have good comfort levels, very good profiles, with excellent functionality. A very comfortable chair that will suit a wide range of users.