

TECHNICAL PRESENTATION

orangebox

G68  
*giroflex*





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**giroflex**

## ***SERIOUS SEATING***

Giroflex would not describe themselves as a 'Revolutionary' business in their style or character they are more 'evolutionary' preferring to evolve, to augment, to improve their products through time a characteristic in keeping with other leading brands in other sectors in today's global marketplace

Since the company was formed in 1872 Giroflex have specialised in the design and manufacture of seating. Many of the features found in today's office chairs have been the result of research linked to Giroflex. In 1919 they launched the world's first swivel office chair that featured a spring as a form of suspension, swivel and sprung hence giro-flex. So they can be truly described as pioneers in the field of office seating.

Close collaborative research with leading ergonomists since the early '70's has led to the development of several world firsts; the Synchronous mechanism that harmonised the recline and pivot of the task chair to the movement of the human body. The collection and study of anthropometric data inspired the complex curved forms of seat and back cushions that supported the pelvis and enable the user to maintain the all important 'S'-shaped curve of the spine, the holy grail to ergonomists and health and safety professionals the world over. The development of the 'Dual-Zone

seat profile that was first introduced on the Giroflex 64 and is carried over onto the G68.

Over 15 years ago Giroflex launched the first chair to be specifically designed with its environmental impact in mind the G33, at the time to the scorn of the worlds press, this principal has lived on in Giroflex's subsequent products with constant research into new processes and materials to further enhance their environmental credibility.

They are one of the few companies in the world today that have the design, engineering and manufacturing capabilities, linked to their financial stability, to develop chair mechanisms. Rather than utilising an off the shelf solution, a strategy becoming all too common these days, with the result being the glut of homogenised similar products with compromised their ergonomic solutions that can be found today. It is this mechanism that provides the platform upon which the chair is then constructed. With the design form and function of each element meticulously controlled and implemented to achieve excellence without compromise.

So yes Giroflex are serious about seating, its what they do, and they do it very well!

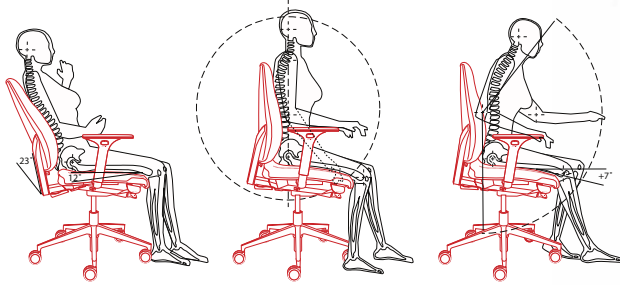


G68

**COLLABORATION**

Since the chair was first shown at Orgatec 2004 the design has undergone several evolutions. Paolo Fancelli the design originator of G68 and Giroflex UK has created a contemporary task chair whose true value results from the balance between manufacturing integrity, fitness for purpose and product lifecycle. This collaboration has resulted in the development of new control interfaces, a new 3D arm, a new base design and further enhancement on both the seat and back cushions profiles.

# ENGINEERING



## G68

### SYNCHRONOUS ORGANICMOVE 3 MECHANISM

The mechanism developed by Giroflex follows the same geometry as the mechanism developed for the renowned G64. Again made predominantly from high pressure die-cast aluminium. The cradle of the mechanism provides the platform for the entire chair, all the controls, arms, seat and back configurations are mounted directly to it.

The movement of the user's back and the chair back rest are precisely point synchronous, preventing slipping when in recline. The mechanism provides progressive resistance compensating for increased weight in recline and enhancing floating sensation. Tilt pivot is positioned toward front of chair under the knees thus reducing pressure under thighs, when in recline. This geometry positions the user in a more poised position when upright.



**giroflex**



## DERIVED FROM THE GREEK **ERGON** (WORK) & **NOMOS** (LAWS)

The science ensuring a good fit between people and the tasks they do, the tools and the equipment they use & the environment they work in. Human abilities, attributes & their physical size vary immensely & the application of ergonomics allows these differences in the workplace (HSE)

### **We were not designed to sit still**

Consequences:

- Poor blood supply
- Build up of lactic acids
- Less oxygen to the brain
- Nutrient deprivation to discs
- Fatigue and discomfort short term
- More serious musculo-skeletal problems longer term e.g. back pain

### **A Guide to Healthy Sitting**

- We are agreed an 'S' shape is preferable?
- We are agreed that movement is preferable?
- We are agreed that awkward or repetitive movements are to be avoided?
  - seat height - at 90°+
  - back height - lumbar to fit small of back
  - armrests - touching the forearms when shoulders and elbows relaxed
  - tension - floating when feet off the floor
  - seat depth - bottom at back and three fingers gap behind knees

### **The user**

- Research has shown that the majority of users don't adjust their chairs
- Ease of use arguably more important than the seating concept itself
- Simple finger tip controls and ease of adjustment essential

### **The purchaser**

- Unnecessary risks taken when chairs don't meet the current legislation
- The worry of anthropometric fit, safe performance and ergonomic satisfaction assured
- Meeting and exceeding current and draft standards essential



## DUAL CONTOUR SEAT

This seat profile was first adopted by Giroflex when they launched the G64 range its benefits have been Scientifically proven: - Maggie Graff studied conventional and forward tilt seats - dual contour takes benefits of both. The front third of the seat slopes down by 7 degrees, creating less pressure under the thighs and increasing blood circulation and encouraging freedom of movement for the legs relaxing the hamstrings and thus preventing the pelvis rocking. The back two thirds remains flat the contouring of the seat cushion cradles the pelvis & prevents the user from slipping forward.

### In practice:

- supported upright sitting
- freedom of movement



### 3D Multi adjustable arm

G646 has a height adjustable arm with a super soft pad which can rotate 180° to allow a closer position to the work surface.



**EASE OF ADJUSTMENT**

Sound ergonomic design is not solely constrained to the contouring and shaping of the seat and back of a task chair or the geometry and movement of the mechanism. All of the above will be rendered pointless if the user is unable to manipulate the chair and adjust it to his or hers own requirements given that we are all , simply put, different shapes and sizes.

**NOTHING IS MORE INTELLIGENT THAN SIMPLICITY**

We believe nothing is more intelligent than simplicity and having achieved a level of engineering and ergonomic performance with G68, we have also ensured that each function of the chair is explained as clearly and simply as possible, to allow each user to position the chair as they need. The inclusion of descriptive graphics in an accent colour further enhances user interface as does the design and texture of the controls themselves; moulded in glass-filled nylon with TPE (thermo plastic elastomer) over-moulding giving a soft tactile touch.



**BACK HEIGHT**  
8 preset positions  
adjustment range =70mm



**BACK LOCK**  
6 preset positions  
adjustment range =0° - 23°



**BODY WEIGHT**  
Infinitely adjustable  
adjustment range =45kg - 130kg



**SEAT HEIGHT**  
Infinitely adjustable  
adjustment range standard  
cylinder = 400 -530mm



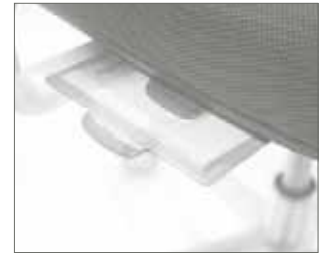
**SEAT DEPTH**  
5 preset positions  
adjustment range =400 - 450mm



**NECK REST**  
Infinitely adjustable for height  
and 3 position angle  
adjustment range =70mm



**MULTI ADJUSTABLE ARM**  
available in dark grey (812) or  
light grey (813) or polished as  
an upcharge



**INSTRUCTION BOOKLET**  
Easy reach integral pull out tray  
featuring clear illustrations and  
postural advice.

# OPERATING INSTRUCTIONS

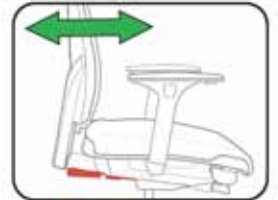
• **Seat Height:**

Pull up on the lever and press down on, or remove weight from the seat. Release the lever to lock the seat at the desired height.



• **Seat Depth:**

Push the lever up and slide the backrest into desired position.



• **Backrest Height Adjustment:**

Press button at end of backrest. Push back into required position and release button.



• **Back Lock**

Push down on the lever and lean against the backrest to recline the seat and back. Pull the lever up to lock in position.



• **Body Weight:**

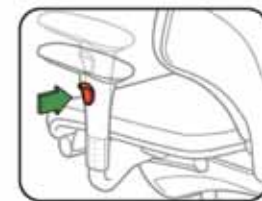
The strength of the synchro mechanism can be adjusted to the user's weight by turning the knob located under the seat. (Turn clockwise to increase resistance, and anti-clockwise to decrease resistance)



• **Multi Adjustable Arm: (if fitted)**

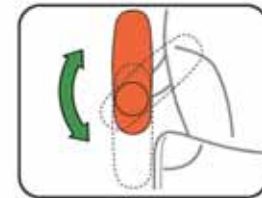
**Height Adjustment:**

Press the button on the outside of the armrest and slide up or down into the desired position. Release the button to lock.



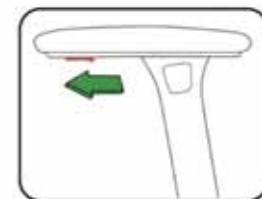
**Armrest Rotation:**

The armrests rotate through 3 different positions, including 180° backwards, just in case they clash with your desk.



**Armrest Lock:**

The armrest will automatically lock in the front position. Slide control on the underside of armrest forward to release the lock and rotate to desired position.





**CHOICE**  
MESH BACK CHAIR



G68



SOFT TOUCH - Black



LINEAR - White



LINEAR TWO TONE - Grey & White



TECHNICAL - Grey

# G68

## Specifications as standard include -

The aluminium parts are available as standard in light grey (813) or dark grey (812). Polished aluminium is an optional upcharge.

**Finish:** polished aluminium is a popular choice for the base and armrests. Other parts that are available polished are the mechanism, the yoke and the outer mesh frame.

**Column:** a brushed chrome gas lift is fitted as standard

**Seat Depth Adjustment:** available as standard feature

**Arms:** multi-functional arm as standard, available in dark grey (812) or light grey (813) or polished as an upcharge

**Lumbar Adjustment:** the backrest can still be adjusted in height which is often sacrificed for chairs with a mesh back construction

**User Graphics:** all adjustments are labelled for ease of use

**Detachable Seat Cushion:** a standard feature for ease of re-upholstery

The mesh back is available in five finish options: Grey Technical, Black Soft Touch, White Linear, Grey Linear and Two Tone grey/White Linear.

A comprehensive and detailed list of the fabric / leather groups used in the G68 range is available in the pricelist.

### Optional Upcharges

Luxury seat upholstery  
Two tone grey & white linear mesh  
Polished aluminium base  
Polished aluminium mechanism  
Polished aluminium yoke  
Polished aluminium mesh frame  
Coathanger

Extended height lift  
Extra height with foot ring and glides  
Glides  
Soft black castors  
Soft grey castors  
Gas lift shroud  
Sprung base



**ENVIRONMENTAL RESPONSIBILITY**



Environmental responsibility is an inherent part of our business culture and not a policy recently adopted to comply with the growing awareness of this issue. Giroflex were the first to market over 15 years ago with product that was designed specifically to address the products ecological impact. They have gone on to develop this strategy further with the introduction of new materials and construction techniques.

Our Environmental and Quality procedures are combined so that in everything we do we seek to address and minimise the impact of our processes and products. From the design of the product the material selection and specification, prototyping, tooling, manufacturing processes and environment, packaging and transport we consider the environmental impact of the product.

The products are further designed to provide enhanced lifecycles with simplified maintenance and repair. Finally once the product is no longer viable it can be recycled with over 99% of the materials being able to be re used.

In 1998 We were the first Office Seating manufacturing site in the UK to be accredited with BS EN ISO 14001: 1996 Environmental Management System Standard and we have gone on to win several accolades for our Environmental Responsibility

**Environmental Data Sheet**  
At a glance.....

|   |                       |                         |   |                       |                         |
|---|-----------------------|-------------------------|---|-----------------------|-------------------------|
| Ecological Footprint (kg/m <sup>2</sup> ) | Carbon Footprint (kg) | Recyclable Content (kg) | Ecological Footprint (kg/m <sup>2</sup> ) | Carbon Footprint (kg) | Recyclable Content (kg) |
| 0.05                                      | 168                   | 92                      | 0.05                                      | 170                   | 99                      |
| G68 TWIN                                  |                       |                         | G68 THREE                                 |                       |                         |

**Life-cycle Breakdown**  
The footprints look at Environmental impact through the entire life-cycle of the product

**Materials Breakdown**  
Our footprint analysis indicates that over 90% of the products environmental impact is down to the raw materials selected. By understanding the footprint of different materials, we can make better decisions on materials selection for forthcoming products.

**Eco Credentials**

- 92% Recyclable (overall 99.9% recyclable content)
- 64% Recycled Materials used in manufacture of G68
- 75% of Giroflex Materials sourced from the UK
- 52% Returnable Packaging used for Giroflex components
- CFPC & HCFPC Free
- Halogen used in upholstery
- Solvent Free adhesives used in manufacture
- 100% Renewable Electricity used in product assembly
- Climate Neutral
- Carbon offsets available on G68 (Giroflex designed mechanism)
- Built for longevity
- BS EN ISO 14001
- Giroflex were the first seating company to achieve this standard in the UK

...leave the faintest footprint



**Best Foot Forward**  
Bringing responsibility down to earth





## DIMENSIONS

### Task Chair General

Seat and back cushions can be replaced on the spot

#### Dimensions and weights

- Seat height: 400 – 530mm
- Total height: 1020 – 1220mm
- Seat width: 460mm
- Seat depth: 400 – 450mm
- Total width (base): 670mm
- Adjustable range of backrest height: 70mm
- Width of backrest: 420mm
- Seat/back apex angle: +23°
- Adjustable weight range of mechanism: 45kg up to 130kg

### Visitor Chair General

Seat and back cushions can be replaced on the spot

#### Dimensions and weights

- Seat height: 455mm
- Seat width: 475mm
- Seat depth: 460mm
- Arm height (above seat): 200mm
- Total height: 920mm
- Total width: 560mm
- Total depth: 620
- Width of backrest: 440mm

## PRODUCT PERFORMANCE STANDARDS

The Giroflex G68 seating range is designed and independently tested to the following European and British standards

**BS EN ISO 9241-5: 1999 ERGONOMICS**

**BS EN ISO 1335-1: 2000 DIMENSIONS**

**BS EN ISO 1335-2: 2000 SAFETY REQUIREMENTS**

**BS EN ISO 1335-3: 2000 SAFETY TEST METHODS**

**BS 5459-2: 2000 STRENGTH AND STABILITY**

## PRODUCT WARRANTY

The Giroflex G68 seating range is covered by a comprehensive five year warranty for use in a typical 8 hour office environment. The cover includes all structural and mechanical elements of the chair, in addition it covers the upholstery using our standard fabric and leather ranges and our standard mesh collection.

For use in a continuous 24hour environment the range carries a warranty for 18 months.

## OPERATIONAL OVERVIEW

Established over 30 years ago in Hengoed South Wales our manufacturing facility has been one of the key factors in our continued success and growth in the UK.

Employing 150 people the factory has produced over 3 million chairs since it opened and today produces on average 3000 units per week. Continued investment and development of the facility, its people and processes has resulted in us receiving many industry accolades over the years.

More recently the development of our dedicated Research and Development facility deploying the latest computer aided design and rapid prototyping techniques has further enhanced our abilities and significantly shortened our 'time to market' giving us the ability to respond well to the constantly evolving environment in which we work.

Despite the fact that we are in principle a manufacturing business our focus remains clearly upon service to our clients our products are clearly targeted to be smart simple never over cooked focused on bringing innovation to real market needs. We try hard to succeed and we believe it shows in the respect and continued loyalty shown to us by our clients through time.

Therefore it goes without saying that we operate our business within recognised international standards for; Quality management, BS EN ISO 9000; 2000, BS EN ISO 14001; 1996 the Environmental Management system, and we have been accredited with the Investors in People Standard.



## ADDED VALUE SERVICES

**Active Ergonomics**, is a specialist Consultancy within Orangebox offering services and products to ensure improved health and productivity at work.

The application of ergonomics ensures a good fit between people and the tasks they do, the equipment they use and the environment in which they work. Our trained ergonomists and designers are available to offer specific assessment and training to support those staff and departments interested in improving the workplace and work practices affecting posture, activity and comfort. For instance:

### Suitable Seating Service

To find the best fit between any individual and their seating we provide an advice, assessment and supply service via telephone and a specifically designed seating-assessment form.

We ensure individuals are provided with the seating types, features and adjustments they require.

**Step 1:** Fill in the Seating Assessment Form with all the required details

**Step 2:** Attach any additional case information relating to seating

**Step 3:** Send to the email / fax on the form

**Step 4:** Receive quote for recommended item/s to be authorised with a Purchase Order

**Step 5:** Receive a chair with the required features and adjustments on trial for 2 weeks.

(**Step 6:** Further adaptations can be made or other items trailed until suitable seating found.)

### End User and 'Champion' Training

To get the greatest benefits from seating and workstations this equipment needs to be used and adjusted properly. Suitable and detailed training can therefore be produced for various targeted audiences. Certain staff can be trained as 'Champions' to assist others in setting up their seating and workstation.

In addition, documents and graphics demonstrating good use and posture are available as hard copy or intranet based documents, meaning all staff can access this information when they need it most.

For more information on any of our services or to speak to an ergonomist please contact active ergonomics 01443 811 982

### Service Centre

All Orangebox Ltd products are covered by a comprehensive warranty to underpin this warranty in the field we have a team of dedicated, trained and equipped service engineers who operate throughout the UK providing care and maintenance services for our products once installed at a clients location. our task seating ranges are designed to facilitate their service and repair on site thus negating the need for the chair to be removed from site.

- Service Engineers
  - On site warranty support
  - Seating audits
  - National team

**active**  
ERGONOMICS

**service**  
CENTRE



Orangebox is a design and innovation led company.

Our aim is for our furniture to achieve a new level of value

and performance to meet the needs of today's changing workplace.

CAF

**giroflex**

SERIOUS SEATING

[www.giroflex.co.uk](http://www.giroflex.co.uk)

**orangebox**

**Showroom**

146/148 Clerkenwell Road, London.  
UK. EC1R 5DG

T. +44(0)20 7837 9922

F. +44(0)20 7837 4441

email. [showroom@orangebox.com](mailto:showroom@orangebox.com)

[www.orangebox.com](http://www.orangebox.com)

**Head Office & Manufacturing**

Penallta Industrial Estate, Hengoed,  
Mid Glamorgan CF82 7QZ

T. +44(0)1443 816604

F. +44(0)1443 816638

email. [sales@orangebox.com](mailto:sales@orangebox.com)

