

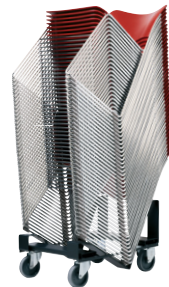


DESIGN BY DAVID ROWLAND 1964

HOWE.COM/40\_4

## 40/4

David Rowland's 40/4 chair is arguably the most significant chair design of the past 50 years. Over 8 million chairs have been sold since its introduction in 1964. Honoured with numerous design awards, and exhibited in several museums all over the world, the 40/4 chair is widely appealing. Whether you go for its excellent ergonomic features, its graceful lines and durability or its unique space-saving attributes, there are at least 40 good reasons to choose this design icon. Renowned for its unsurpassed stacking and handling characteristics combined with its elegant and spare aesthetic, 40/4 is rightly a great favourite of specifying architects and designers. With seats and backs in polyamide, finely crafted wood veneer or as upholstered version, 40/4 does great service across the board in schools, universities, churches and cathedrals, as well as in corporate offices, conference centres and training establishments. 40/4 is also available in armchair, barstool, lounge chair, swivel chair, outdoor variations, and with wood frame.





## DESCRIPTION

Multi-purpose stacking chairs for conferencing, meeting, training, dining and visiting use. Stackable up to 40 chairs on dolly.

## PRODUCT DETAILS

### SEATS, BACKS AND ARMRESTS

The seats and backs are triple curved. The front of the seat is with "waterfall" curve.

### VENEER VERSION

The surface veneer is in matt lacquered 0.02" knife-cut sanded veneer on both sides. The inner layers are in 0.05" rotary cut beech: 7 layers on seat, 9 layers on back, 7 layers on armrests. The thickness of the seat is 0.35" - 0.39", back 0.39" - 0.43" and armrest 0.35" - 0.39".

Standard finishes: maple, beech, oak, cherry, ash, birch, and walnut as well as black and white stained.

### POLYAMIDE VERSION

The polyamide is a PA6 with fire-retarder. The surface is slightly textured and matt coated. The thickness of the seat is 0.22" - 0.39", back 0.26" - 0.39" and armrest 0.39".

Standard colours: Howe grey, Ayers Rock red, Black, Blue eyes, Coconut, Mandarin, Olive green, Marine blue, Aubergine and Mint Turquoise.

### METAL VERSION

The metal is cold rolled steel. The surface is slightly textured and matt coated. The seat and back are made from 0.04" coil. Blanks are formed and edge is curled in a die. Curl is to give strength. Seat has been reinforced with a stamped bottom plate. Seat/back are mounted with rivets to the frame. The thickness of the seat and back are 0.04". Standard colours: Black ME200 and White ME300.

### FRAMES

The sled frame is in round, solid steel rod (Steel quality C15K, norm EN10278/ISO 286-2). Side chair (linking and non-linking): Ø0.43" rod. Armchair: Ø0.43" rod/Ø0.51" rod at rearlegs and arm support. Frame finish comes in chrome (min. 20 µ) or black, alu grey or Howe grey powder coating (min. 50 µ) as standard. The glides are in transparent polycarbonate (PC). Glides with integrated moulded felt are optional. On chairs with integrated linking (fin and hook/eye linking) one male and one female glide apply.



## VARIETIES

The side chair is available with integrated linking systems, providing strong and efficient linking for mass seating. The linking systems are an integral part of the frame and are a solid three-point connection; 2 integral frame joints plus an interlocking glide joining point.

Two types of integrated linking systems are available:

1. Fin linking
2. Hook and eye linking
3. Brace linking

### LOUNGE VERSION

The side chair is available as lounge version with lower seating height, wider seat and a more leaned back seating position. The solid steel rod (steel quality C15K, norm EN10278/SOP 286-2) is  $\varnothing 0.43''$ . The lounge version is available in veneer, and upholstery finish.

### XTRA VERSION

The side chair is available in an enlarged version with higher back, and wider seat and back. The solid steel rod (steel quality C35K, norm EN10278/SOP 286-2) is  $\varnothing 0.43''$ . The xtra version is available in veneer and upholstery finish.

### BARSTOOL VERSION

The side chair is available as barstool version with seating height of 30.5" as standard. Seating height 24.8" also available (counter height). The seat and back is more narrow and seating position more leaned back for optimal comfort. The solid steel rod (steel quality C15K, norm EN10278/ISO 286-2) is  $\varnothing 0.55''$ . The barstool version is available in veneer, polyamide and upholstery finish.

### OUTDOOR VERSION

The side chair, armchair and barstool are available for outdoor use. The frame is treated with e-coat and powdercoated on top - standard colour is alu grey. The seat and back are injection moulded PA6 - standard colour is black. The outdoor version is thoroughly tested to outdoor conditions.

### SWIVEL VERSION

The 40/4 swivel chair is available in side chair and armchair versions. Choose between castors or glides. It is height adjustable providing a seating height span from 18.1" - 23" on castors and a seating height span from 16.7" - 21.5" on glides. The seat, back and armrests are available in polyamide (PA6), veneer and



upholstery finishes. The solid steel frame (steel quality C15K, norm EN10278/ISO 286-2) is Ø0.51". The seat support is in steel, and the aluminium die cast spindle dimension is Ø1.10". Castors with integrated wheel brakes are with HOWE grey core and zinc corpus. Soft lane castors as an option. Glides in PP.

#### WOOD FRAME VERSION

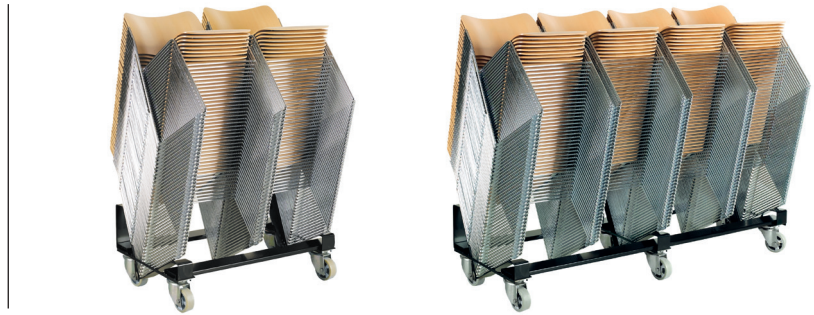
The 40/4 wood frame is an alternative to the original chair with its iconic steel rod sled frame. The 40/4 wood frame is FSC certified. The goal was to retain the proportions, angles, and characteristic curves whilst giving the choice of a different material. The frame is pressed veneer with the dimensions of 1.06" x 0.91" mm. The connector is in zinc and is powder coated in HOWE grey. The 40/4 wood frame is available as a side chair with and without an integrated seat pad. The standard finishes are beech and oak as well as black stained and walnut stained. A floor linking system is available for the side chair. The linking brackets are retrofittable.

#### UPHOLSTERY

The upholstery is in fabric, trevira, microfibre, leather or PU. The back is fully upholstered. As standard the cushioning is fire retardant CMHR polyurethane foam. Thickness is 0.79" on the seat and 0.60" on the back. Foam density is 121.3 lb/cu ft on the seat and 70.5 lb/cu ft on the back. Arm rest: 0.60" thickness and density 70.5 lb/cu ft. Thin foam option available for Trevira and wool fabrics upon request. The 40/4 chair in veneer and polyamide is available as semi-upholstered (seat upholstered - back in veneer or polyamide). This means reduced stackability.

#### STACKING CAPACITY

The side chair in veneer and polyamide is stackable up to 40 chairs in height of 57.7" on dolly. Rows of 2, 3, or 4 side chairs in veneer or polyamide with fin or eye/hook linking can be lifted and stacked without separation on double, triple or quadruple dollies. The side chair in metal is stackable up to 40 chairs in height of 57.7" on dolly. The upholstered side chair is stackable up to 25 chairs in height of 70" on dolly. The armchair is stackable up to 25 chairs in height of 75.8" (veneer and polyamide) and in height of 73.8" (upholstered) on dolly. The lounge chair in veneer is stackable up to 20 chairs in height of 39.4" on floor. The xtra chair is stackable up to 40 chairs in height of 57.9" (veneer) and up to 25 chairs in height of 70.3" (upholstered) on dolly. The barstool in veneer and polyamide is stackable up to 10 chairs in height of 49.6" on floor. The 40/4 wood frame is stackable up to 25 chairs in height of 67.7" on dolly and up to 12 chairs on floor in height of 42.9". The 40/4 wood frame with seat pad is stackable up to 20 chairs in height of 61.6" on dolly and up to 10 chairs on floor in height of 41.1".



#### REQUIRED FLOOR SPACE

Single dolly = 40 chairs = 5.06 sq. ft floor space.

Double dolly = 80 chairs = 10.12 sq. ft floor space.

Triple dolly = 120 chairs = 15.07 sq. ft floor space.

Quadruple dolly = 160 chairs = 20.13 sq. ft floor space.

#### DIMENSIONS AND WEIGHT

##### DIMENSIONS OF VENEER CHAIRS

|  | CHAIR  | LOUNGE | XTRA  | BARSTOOL | COUNTER<br>BARSTOOL | WOOD<br>SWIVEL<br>FRAME | WOOD<br>FRAME |
|--|--------|--------|-------|----------|---------------------|-------------------------|---------------|
| Depth of seat:                             | 17.1"  | 17.1"  | 17.1" | 15.9"    | 15.9"               | 16.9"                   | 17.1"         |
| Width of seat:                             | 16.7"  | 18.3"  | 18.3" | 15.9"    | 15.9"               | 16.7"                   | 16.1"         |
| Height of back:                            | 9.8"   | 10"    | 10"   | 8.9"     | 8.9"                | 9.8"                    | 9.6"          |
| Width of back:                             | 18.3"  | 19.9"  | 19.9" | 17.5"    | 17.5"               | 18.3"                   | 18.3"         |
| Height of chair:                           | 30.3"  | 28"    | 30.5" | 42.3"    | 37"                 | 31-35.8"                | 30.5"         |
| Depth of chair:                            | 20.9"  | 23.5"  | 20.9" | 21.3"    | 21.3"               | 26"                     | 21.1"         |
| Width of chair:                            | 19.31" | 20.7"  | 20.9" | 18.7"    | 18.7"               | 26"                     | 20.7"         |
| Width of two chairs<br>with brace linking: | 40.4"  | N/A    | 43.5" | N/A      | N/A                 | N/A                     | N/A           |
| Width of chair<br>with armrest:            | 23.8"  | N/A    | N/A   | N/A      | N/A                 | 26"                     | N/A           |
| Seating height:                            | 17.9"  | 15.7"  | 17.9" | 31"      | 24.8"               | 18-23.4"                | 18.1"         |
| Armrest height:                            | 26"    | N/A    | N/A   | N/A      | N/A                 | 26.5-31.5"              | N/A           |

##### WEIGHT

|                          | POLYAMIDE     | VENEER  | UPHOLSTERED      |
|--------------------------|---------------|---------|------------------|
| Side chair - non linking | 14.3 lb       | 13.4 lb | 13.9 lb          |
| Side chair - linking     | 14.6 lb       | 13.9 lb | 14.3 lb          |
| Armchair - non linking   | 17 lb         | 15.7 lb | 16.8 lb          |
| Armchair - linking       | 17.2 lb       | 15.9 lb | 16 lb            |
| Lounge chair             | not available | 13.2 lb | 14.1 lb          |
| Xtra chair - non linking | not available | 13.9 lb | 14.3 lb          |
| Xtra chair - linking     | not available | 14.1 lb | 14.6 lb          |
| Barstool                 | 22.9 lb       | 20.1 lb | 20.7 lb          |
| Swivel side chair        | 25.6 lb       | 24.7 lb | 25.1 lb          |
| Swivel armchair          | 27.3 lb       | 26.5 lb | 26.9 lb          |
| Wood framed side chair   | not available | 8.8 lb  | 11 lb (seat pad) |



## ACCESSORIES

TRANSPORT DOLLIES with capacity of 40 chairs per unit. Single dolly (40.8 lb), double dolly (57.3 lb), triple dolly (75 lb), quadruple dolly (91.5 lb).

ROW SPACER BAR holding linked rows of chairs secure in the case of an emergency - often a local authority requirement. The steel bar is 0.12" in thickness and aisle created is 13.8" from seat front to chair back. Fixed with rubber lock.

ROW NUMBERING TAG in black POM. 1-2 letters/numbers inclusive.

SEAT NUMBERING TAG in black POM. 1-2 letters/numbers inclusive.

WRITING TABLET, right or left handed version. Attachable/detachable. Black or white compact laminate version in 0.39" thickness. With or without cup holder.

### TRANSPORTER FOR WRITING TABLETS

Dolly with three boxes, capacity 18 pcs. Dolly dimensions: L 23.6" x D 15.7" x H 5.5".  
Double dolly with six boxes, capacity 36 pcs. Dolly dimensions: L 36" x D 22.2" x H 5.5".

BOOK RACK in solid steel rod. Retrofitable mounting on frame underneath the seat.

HYMN BOOK HOLDER in chrome, 4.7" high, 6.9" long, 6.1 wide (distance between front legs of chairs). With integrated linking.

TABLE SURFACE PROTECTOR for armchairs - Soft polyamide device mounted on steel rod below the armrest. Armchair can be hung on the table without scratching the table surface. Cannot be installed subsequently.

LINKING TOOL aiding the linking/unlinking operation of chairs with integrated frame linking.

LOOSE LINKING SYSTEMS available for a variety of situations:

- Armchair-to-Armchair: Linking device mounted on armrests
- Armchair-to-side chair: Attachable/detachable linking devices mounted on the frame.
- Side chair-to-side chair: Attachable/detachable linking devices mounted on the frame.
- Radius linking device available - provides a radiused arc up to 17 degrees.



## ERGONOMY AND ENVIRONMENT

The chairs triple curved form moulds to body's natural contours. The waterfall seat design does not restrict blood circulation and so prevents undue pressure under the thighs. The stacking of the chairs is ergonomically correct - the chairs only have to be lifted low to slide from front. The seats, backs, armrests, frames and chroming are all produced according to ISO14001 standards. All parts of the chair can be dismantled and recycled.

## TESTS

The chair is for severe contract use. The chair has been tested to EN 15373, level 3 and ANSI/BIFMA X5.1 for strength and durability. The side chair in polyamide, veneer, and upholstery has passed the emission test ANSI/BIFMA X7.1 and thus contributes to a healthy indoor climate. The side chair in polyamide has also passed the French M3 fire test, the BS 7176 fire test, the Italian UNI 8457 fire test as well as the American CAL TB-133 fire test. The chair with upholstery has also passed the American CAL TB-133 fire test.

The lounge chair has been tested to EN 15373:2008, level 3 for strength and durability. The xtra chair has been tested to EN 16139:2013, level 2 for strength and durability and the ANSI BIFMA X5.1.

The barstool has been tested to EN 15373:2009, level 3 for strength and durability, and the ANSI/BIFMA X5.1.

The outdoor chair has been tested to CEN/TR 581-4, 2005 and DS/EN/ISO 9227, 2006 for outdoor use.

The swivel chair has been tested to EN 15373:2007, level 3 for strength and durability, and the ANSI/BIFMA X5.1.

The wood frame chair has been tested to EN 16139, level 1 for strength and durability.

## WARRANTIES

HOWE a/s gives a 10 years guarantee on all 40/4 chairs against weld breakages, defective material, workmanship and performance under normal use. For full information please see the warranty provision on [howe.com](http://howe.com).





## PACKAGING

Side chairs = 10 per carton/11.65 cu ft

Armchairs = 5 per carton/13.06 cu ft

Upholstered side chairs = 6 per carton

Upholstered side chairs with extra thickness cushioning = 5 per carton

Upholstered armchairs = 5 per carton

Upholstered armchairs with extra thickness cushioning = 5 per carton

## AWARDS

**1964:** Grand Prix, Milan Triennale for '40/4' Chair

(one of only two Americans to receive this award, the other one being Buckminster Fuller for his Geodesic Domes).

**1965:** American Institute of Designers (AID) award for best piece of business furniture.

**1965:** Product Engineering Magazine Award, '40/4' Chair

(one of 12 best products introduced in the United States in 1965).

**1969:** Austrian Gold Medal Award for furniture.

**1979:** Institute of Business Designers (IBD) Gold Medal for best product in Special Seating Category.

**1979:** Institute of Business Designers (IBD) Gold Medal for best product of entire awards competition.

**1980:** International Council of Societies of Industrial Design (ICSID) Exhibition, Milan, Italy.

**1984:** 'Design in America: The Cranbrook Vision 1925-1950'.

**1992:** Metropolis Magazine recognized '40/4' as one of the Classic Designs from around the World - of the Past 50 Years.

## PERMANENT COLLECTIONS

The chair is in the permanent collections of the following museums:

**NEW YORK** Museum of Modern Art, Cooper-Hewitt Museum of Design, Metropolitan Museum of Art, The Brooklyn Museum

**LONDON** The Design Museum

**PARIS** Musée des Arts Décoratifs

**CHICAGO** Art Institute of Chicago

**MONTREAL** Musée des Arts Décoratifs

**WEIL AM RHEIN** The Vitra Museum

**MUNICH** Die Neue Sammlung

**RIO DE JANEIRO** Museu de Arte Moderna

**FLINT** Institute of Fine Arts

**PHILADELPHIA** Philadelphia Museum of Art

**CRANBROOK** Cranbrook Academy of Art Museum