



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 plastic resin, 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 0,6 mm knife-cut sanded veneer on both sides. The inner layers are in 1,2 mm rotary cut beech: 7 layers on seat, 9 layers on back, 7 layers on armrests. The thickness of the seat is 9-10 mm, back 10-11 mm and armrest 9-10 mm.

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 5,5-10 mm, back 6,5-10 mm and armrest 10 mm.

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 1 mm 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 1 mm Standard colours: Black ME200, White ME300, Red ME110.

FRAMES

The sled frame is in round, solid steel rod (Steel quality C15K, norm EN10278/ISO 286-2). Side chair (linking and non-linking): Ø11 mm rod. Armchair: Ø11 mm rod/Ø13 mm 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.

Three 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 $\varnothing 11$ mm. The lounge version is available in veneer, and upholstery finish.

BARSTOOL VERSION

The side chair is available as barstool version with seating height of 769 mm as standard. Seating heights from 550 mm to 800 mm also available. 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 $\varnothing 14$ mm. 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 frame, seat and back can also be ordered in any colour from the RAL-fan. 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 450 mm - 565 mm on castors and a seating height span from 425 mm - 540 mm 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 $\varnothing 13$ mm. The seat support is in steel, and the aluminium die cast spindle dimension is $\varnothing 28$ mm. Castors with integrated wheel brakes are with HOWE grey core and zinc corpus. Soft lane castor 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 27 x 23 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

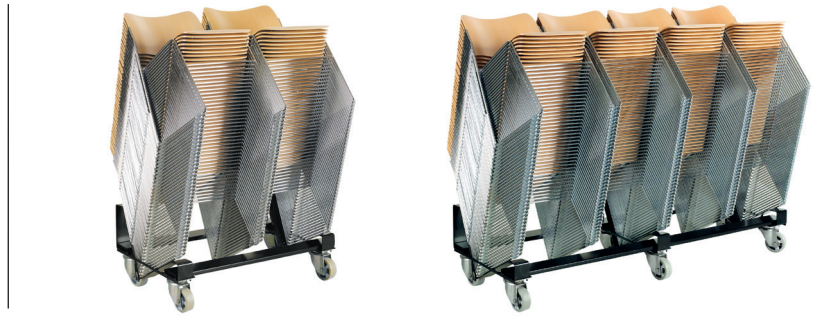
The upholstery is in fabric, trevira, microfibre, leather or PU. The back is fully upholstered. As standard the cushioning is fire retardant CMHR polyurethane foam. Thickness is 20 mm on the seat and 15 mm on the back. Foam density is 55 kg/m³ on the seat and 32 kg/m³ on the back. Arm rest: 15 mm thickness and density 32 kg/m³. 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 1823 mm 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 1651 mm on dolly. The upholstered side chair is stackable up to 25 chairs in height of 1775 mm on dolly. The armchair is stackable up to 25 chairs in height of 1820mm (veeneer and polyamide) and in height of 1925 mm (upholstered) on dolly. The lounge chair in veneer is stackable up to 20 chairs in height of 1074 mm on floor. The barstool in veneer and polyamide is stackable up to 10 chairs in height of 1256 mm on floor. The 40/4 wood frame is stackable up to 25 chairs in height of 1716 mm on dolly and up to 12 chairs on floor in height of 1090 mm. The 40/4 wood frame with seat pad is stackable up to 20 chairs in height of 1561 mm on dolly and up to 10 chairs on floor in height of 1044 mm.

REQUIRED FLOOR SPACE

Single dolly = 40 chairs = 0,47 sq. metres floor space
 Double dolly = 80 chairs = 0,94 sq. metres floor space
 Triple dolly = 120 chairs = 1,40 sq. metres floor space
 Quadruple dolly = 160 chairs = 1,87 sq. metres floor space



DIMENSIONS AND WEIGHT

DIMENSIONS OF VENEER CHAIRS

	CHAIR	LOUNGE	BARSTOOL	COUNTER BARSTOOL	SWIVEL	WOOD FRAME
Depth of seat:	440 mm	435 mm	410 mm	410 mm	440 mm	430 mm
Width of seat:	425 mm	465 mm	405 mm	405 mm	425 mm	410 mm
Height of back:	256 mm	266 mm	232 mm	232 mm	256 mm	265 mm
Width of back:	463 mm	503 mm	443 mm	443 mm	463 mm	463 mm
Height of chair:	765 mm	704 mm	1073 mm	937 mm	775-900 mm	770 mm
Depth of chair:	533 mm	595 mm	525 mm	525 mm	658 mm	534 mm
Width of chair:	485 mm	525 mm	474 mm	474 mm	658 mm	523 mm
Width of two chairs						
with brace linking:	1024 mm	N/A	N/A	N/A	N/A	N/A
Width of chair						
with armrest:	600 mm	N/A	N/A	N/A	658 mm	N/A
Seating height:	456 mm	386 mm	775 mm	630 mm	460-585 mm	456 mm
Armrest height:	655 mm	N/A	N/A	N/A	665-790 mm	N/A

WEIGHT

	Plastic resin version	Veneer version	Upholstered version
Side chair - non linking:	6,5 kg	6,1 kg	6,3 kg
Side chair - linking:	6,6 kg	6,3 kg	6,5 kg
Armchair - non linking:	7,7 kg	7,1 kg	7,6 kg
Armchair - linking:	7,8 kg	7,2 kg	7,7 kg
Lounge chair:	not available	6,0 kg	6,4 kg
Barstool:	10,4 kg	9,1 kg	9,4 kg
Swivel side chair	11,6 kg	11,2 kg	11,4 kg
Swivel armchair	12,4 kg	12,0 kg	12,2 kg
Wood framed side chair	not available	4,7 kg	5,7 kg (seat pad)



ACCESSORIES

TRANSPORT DOLLIES with capacity of 40 chairs per unit. Single dolly (18,5 kg), double dolly (26 kg), triple dolly (34 kg), quadruple dolly (41,5 kg).

ROW SPACER BAR holding linked rows of chairs secure in the case of an emergency - often a local authority requirement. The steel bar is 3 mm in thickness and aisle created is 350 mm from seat front to chair back. Fixed with rubber lock.

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

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

WRITING TABLET, right or left handed version. Attachable/detachable. Black or white compact laminate version in 10 mm thickness. With or without cup holder.

TRANSPORTER FOR WRITING TABLETS, dolly with three boxes, capacity 24 pcs. (L 410 mm x D 610 mm x H 1400 mm). Double dolly with six boxes, capacity 48 pcs. (L 810 mm x D 610 mm x H 1400 mm).

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

HYMN BOOK HOLDER in chrome, 120 mm high, 175 mm long, 154 mm wide (distance between front legs of chairs). With integrated linking.

TABLE SURFACE PROTECTOR for armchairs - Soft plastic 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 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.

PACKAGING

Side chairs = 10 per carton/0,33 m³

Armchairs = 5 per carton/0,37 m³

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