

Mirra® 2 Chairs

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Specifications are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice in finishes, materials, specifications, and models and to discontinue models and finishes.

For specific information about features and options available on each model, prices, and ordering information, please refer to the current Herman Miller Mirra® 2 Chairs Price Book.

Mirra® 2 Chairs

Performance Information

Herman Miller, Inc., products are designed, developed and tested to meet and exceed industry standards.

Mirra 2 seating has been tested to the applicable requirements of ANSI/BIFMA X5.1-2011 (general-purpose office chair tests). In addition Mirra 2 seating is tested to Herman Miller proprietary performance tests which are engineered/created for the specific innovative design and options of Mirra 2.

Formal certification validation to industry standards for structural, flammability, ergonomics and GREENGUARD Certification (off gassing, VOC's, etc.) is maintained on the Herman Miller KIOSK under Product Test Reports. Reports are available through your Herman Miller dealer or salesperson.

Herman Miller's Quality Assurance Group randomly and periodically tests standard products (seating) to ensure ongoing compliance to ANSI/BIFMA and Herman Miller corporate standards.

The following measurements reflect dimensional information necessary for space planning and standards/codes compliance data. The measurements relevant to standards/codes were taken with a Chair Measuring Device (CMD) in accordance with the BIFMA G-1 2013 ergonomic guideline. Other measurements were taken using a variety of techniques.

Mirra® 2 Chairs
Methodology and Dimension Description

Low-Height-Range Work Chairs with Tilt Limiter and Seat Angle (Seat height and overall height shown with 2 1/2" casters)

Work Chairs: Low-Height Range, Tilt Limiter and Seat Angle, Fixed Seat Depth

Chair Description	Seat Height	Seat Depth	Seat Width ¹	Seat Pan Angle ²	Seat-to-Back Angle ³	Backrest Height	Lumbar Support ⁴	Back Width ⁵
Adjustable Arms								
MRF113AWF	14.75-19"	16.25"	19.25"	-2.2/5°	96.4°	22.9"	4 1/2"	15.4/21.3"
Fixed Arms								
MRF113PWF	14.75-19"	16.25"	19.25"	-2.2/5°	96.4°	22.9"	4 1/2"	15.4/21.3"
No Arms								
MRF113NF	14.75-19"	16.25"	19.25"	-2.2/5°	96.4°	22.9"	4 1/2"	15.4/21.3"

Armpads Inside width ⁶	Armpads Outside width ⁶	Overall Height	Seat-to-Back Angle Range	Tilt Range ⁷ Back	Tilt Range ⁷ Seat	Armpad Height ⁸	Base Diameter Outside	Base Diameter Centerline	Weight ⁹ (Pounds)
14.3/20.5"	26.0/31.0"	41.75"	94.3 – 106.8°	92.3/99.5/124°		6.0 – 11.5"	26.5"	25"	35
20"	28"	41.75"	94.3 – 106.8°	92.3/99.5/124°		8.3"	26.5"	25"	35
N/A	N/A	41.75"	94.3 – 106.8°	92.3/99.5/124°		N/A	26.5"	25"	33.5

Work Chairs: Low-Height Range, Tilt Limiter and Seat Angle, Adjustable Seat Depth

Chair Description	Seat Height	Seat Depth	Seat Width ¹	Seat Pan Angle ²	Seat-to-Back Angle ³	Backrest Height	Lumbar Support ⁴	Back Width ⁵
Adjustable Arms								
MRF113AWA	14.75-19"	16.25 – 18"	19.5"	-2.2/5°	96.4°	22.9"	4 1/2"	15.4/21.3"
Fixed Arms								
MRF113PWA	14.75-19"	16.25 – 18"	19.5"	-2.2/5°	96.4°	22.9"	4 1/2"	15.4/21.3"
No Arms								
MRF113NA	14.75-19"	16.25 – 18"	19.5"	-2.2/5°	96.4°	22.9"	4 1/2"	15.4/21.3"

Armpads Inside width ⁶	Armpads Outside width ⁶	Overall Height	Seat-to-Back Angle Range	Tilt Range ⁷ Back	Tilt Range ⁷ Seat	Armpad Height ⁸	Base Diameter Outside	Base Diameter Centerline	Weight ⁹ (Pounds)
14.3/20.5"	26.0/31.0"	41.75"	94.3 – 106.8°	92.3/99.5/124°		6.0 – 11.5"	26.5"	25"	34
20"	28"	41.75"	94.3 – 106.8°	92.3/99.5/124°		8.3"	26.5"	25"	34
N/A	N/A	41.75"	94.3 – 106.8°	92.3/99.5/124°		N/A	26.5"	25"	32.5

¹ Widest seat width.

² Forward angle/neutral angle.

³ Stationary chair in neutral position.

⁴ Height range with lumbar pad in lowest position and highest position.

⁵ Minimum/maximum back width.

⁶ Minimum/maximum position for adjustable arms. (Adjustable arms can also pivot 20° inward and 20° outward.)

⁷ Forward angle/neutral angle/reclined angle. ⁸From seat height ⁹With h-alloy base

Methodology and Dimension Description

Low-Height-Range Work Chairs with Tilt Limiter (Seat height and overall height shown with 2 1/2" casters)

Work Chairs: Low-Height Range, Tilt Limiter, Fixed Seat Depth

Chair Description	Seat Height	Seat Depth	Seat Width ¹	Seat Pan Angle ²	Seat-to-Back Angle ³	Backrest Height	Lumbar Support ⁴	Back Width ⁵
Adjustable Arms								

MRF112AWF	14.75-19"	16.25"	19.25"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"
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Fixed Arms

MRF112PWF	14.75-19"	16.25"	19.25"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"
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No Arms

MRF112NF	14.75-19"	16.25"	19.25"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"
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Armpads Inside width ⁶	Armpads Outside width ⁶	Overall Height	Seat-to-Back Angle Range	Tilt Range ⁷ Back	Tilt Range ⁷ Seat	Armpad Height ⁸	Base Diameter Outside	Base Diameter Centerline	Weight ⁹ (Pounds)
14.3/20.5"	26.0/31.0"	41.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	6.0 – 11.5"	26.5"	25"	35
20"	28"	41.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	8.3"	26.5"	25"	35
N/A	N/A	41.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	N/A	26.5"	25"	33.5

Work Chairs: Low-Height Range, Tilt Limiter, Flex Front™ Adjustable Seat Depth

Chair Description	Seat Height	Seat Depth	Seat Width ¹	Seat Pan Angle ²	Seat-to-Back Angle ³	Backrest Height	Lumbar Support ⁴	Back Width ⁵
Adjustable Arms								

MRF112AWA	14.75-19"	16.25 – 18"	19.5"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"
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Fixed Arms

MRF112PWA	14.75-19"	16.25 – 18"	19.5"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"
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No Arms

MRF112NA	14.75-19"	16.25 – 18"	19.5"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"
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Armpads Inside width ⁶	Armpads Outside width ⁶	Overall Height	Seat-to-Back Angle Range	Tilt Range ⁷ Back	Tilt Range ⁷ Seat	Armpad Height ⁸	Base Diameter Outside	Base Diameter Centerline	Weight ⁹ (Pounds)
14.3/20.5"	26.0/31.0"	41.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	6.0 – 11.5"	26.5"	25"	34
20"	28"	41.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	8.3"	26.5"	25"	34
N/A	N/A	41.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	N/A	26.5"	25"	32.5

¹ Widest seat width.² Neutral angle.³ Stationary chair in neutral position.⁴ Height range with lumbar pad in lowest position and highest position.⁵ Minimum/maximum back width.⁶ Minimum/maximum position for adjustable arms. (Adjustable arms can also pivot 20° inward and 20° outward.)⁷ Neutral angle/reclined angle. ⁸ From seat height ⁹ With h-alloy base

Mirra® 2 Chairs
Methodology and Dimension Description

Low-Height-Range Work Chairs with Standard Tilt (Seat height and overall height shown with 2 1/2" casters)

Work Chairs: Low-Height Range, Standard Tilt, Fixed Seat Depth

Chair Description	Seat Height	Seat Depth	Seat Width ¹	Seat Pan Angle ²	Seat-to-Back Angle ³	Backrest Height	Lumbar Support ⁴	Back Width ⁵
Adjustable Arms								
MRF111AWF	14.75-19"	16.25"	19.25"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"
Fixed Arms								
MRF111PWF	14.75-19"	16.25"	19.25"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"
No Arms								
MRF111NF	14.75-19"	16.25"	19.25"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"

Armpads Inside ⁶	Armpads Outside ⁶	Overall Height	Seat-to-Back Angle Range	Tilt Range ⁷ Back	Seat	Armpad Height ⁸	Base Diameter Outside	Centerline	Weight ⁹ (Pounds)
14.3/20.5"	26.0/31.0"	41.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	6.0 – 11.5"	26.5"	25"	35
20"	28"	41.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	8.3"	26.5"	25"	35
N/A	N/A	41.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	N/A	26.5"	25"	33.5

Work Chairs: Low-Height Range, Standard Tilt, Flex Front™ Adjustable Seat Depth

Chair Description	Seat Height	Seat Depth	Seat Width ¹	Seat Pan Angle ²	Seat-to-Back Angle ³	Backrest Height	Lumbar Support ⁴	Back Width ⁵
Adjustable Arms								
MRF111AWA	14.75-19"	16.25 – 18"	19.5"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"
Fixed Arms								
MRF111PWA	14.75-19"	16.25 – 18"	19.5"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"
No Arms								
MRF111NA	14.75-19"	16.25 – 18"	19.5"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"

Armpads Inside ⁶	Armpads Outside ⁶	Overall Height	Seat-to-Back Angle Range	Tilt Range ⁷ Back	Seat	Armpad Height ⁸	Base Diameter Outside	Centerline	Weight (Pounds)
14.3/20.5"	26.0/31.0"	41.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	6.0 – 11.5"	26.5"	25"	34
20"	28"	41.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	8.3"	26.5"	25"	34
N/A	N/A	41.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	N/A	26.5"	25"	32.5

¹ Widest seat width.

² Neutral angle.

³ Stationary chair in neutral position.

⁴ Height range with lumbar pad in lowest position and highest position.

⁵ Minimum/maximum back width.

⁶ Minimum/maximum position for adjustable arms. (Adjustable arms can also pivot 20° inward and 20° outward.)

⁷ Neutral angle/reclined angle. ⁸ From seat height ⁹ With h-alloy base

Methodology and Dimension Description

Standard-Height-Range Work Chairs with Tilt Limiter and Seat Angle (Seat height and overall height shown with 2 1/2" casters)

Work Chairs: Standard-Height Range, Tilt Limiter and Seat Angle, Fixed Seat Depth

Chair Description	Seat Height	Seat Depth	Seat Width ¹	Seat Pan Angle ²	Seat-to-Back Angle ³	Backrest Height	Lumbar Support ⁴	Back Width ⁵
Adjustable Arms								

MRF123AWF	16–20.5"	16.25"	19.25"	-2.2/5°	96.4°	22.9"	4 1/2"	15.4/21.3"
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Fixed Arms

MRF123PWF	16–20.5"	16.25"	19.25"	-2.2/5°	96.4°	22.9"	4 1/2"	15.4/21.3"
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No Arms

MRF123NF	16–20.5"	16.25"	19.25"	-2.2/5°	96.4°	22.9"	4 1/2"	15.4/21.3"
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Armpads Inside width ⁶	Armpads Outside width ⁶	Overall Height	Seat-to-Back Angle Range	Tilt Range ⁷		Armpad Height ⁸	Base Diameter		Weight ⁹ (Pounds)
				Back	Seat		Outside	Centerline	
14.3/20.5"	26.0/31.0"	42.75"	94.3 – 106.8°	92.3/99.5/124°		6.0 – 11.5"	26.5"	25"	35
20"	28"	42.75"	94.3 – 106.8°	92.3/99.5/124°		8.3"	26.5"	25"	35
N/A	N/A	42.75"	94.3 – 106.8°	92.3/99.5/124°		N/A	26.5"	25"	33.5

Work Chairs: Standard-Height Range, Tilt Limiter and Seat Angle, Adjustable Seat Depth

Chair Description	Seat Height	Seat Depth	Seat Width ¹	Seat Pan Angle ²	Seat-to-Back Angle ³	Backrest Height	Lumbar Support ⁴	Back Width ⁵
Adjustable Arms								

MRF123AWA	16–20.5"	16.25 – 18"	19.5"	-2.2/5°	96.4°	22.9"	4 1/2"	15.4/21.3"
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Fixed Arms

MRF123PWA	16–20.5"	16.25 – 18"	19.5"	-2.2/5°	96.4°	22.9"	4 1/2"	15.4/21.3"
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No Arms

MRF123NA	16–20.5"	16.25 – 18"	19.5"	-2.2/5°	96.4°	22.9"	4 1/2"	15.4/21.3"
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Armpads Inside width ⁶	Armpads Outside width ⁶	Overall Height	Seat-to-Back Angle Range	Tilt Range ⁷		Armpad Height ⁸	Base Diameter		Weight ⁹ (Pounds)
				Back	Seat		Outside	Centerline	
14.3/20.5"	26.0/31.0"	42.75"	94.3 – 106.8°	92.3/99.5/124°		6.0 – 11.5"	26.5"	25"	34
20"	28"	42.75"	94.3 – 106.8°	92.3/99.5/124°		8.3"	26.5"	25"	34
N/A	N/A	42.75"	94.3 – 106.8°	92.3/99.5/124°		N/A	26.5"	25"	32.5

¹ Widest seat width.² Forward angle/neutral angle.³ Stationary chair in neutral position.⁴ Height range with lumbar pad in lowest position and highest position.⁵ Minimum/maximum back width.⁶ Minimum/maximum position for adjustable arms. (Adjustable arms can also pivot 20° inward and 20° outward.)⁷ Forward angle/neutral angle/reclined angle. ⁸ From seat height ⁹ With h-alloy base

Mirra® 2 Chairs
Methodology and Dimension Description

Standard-Height-Range Work Chairs with Tilt Limiter (Seat height and overall height shown with 2 1/2" casters)

Work Chairs: Standard-Height Range, Tilt Limiter, Fixed Seat Depth

Chair Description	Seat Height	Seat Depth	Seat Width ¹	Seat Pan Angle ²	Seat-to-Back Angle ³	Backrest Height	Lumbar Support ⁴	Back Width ⁵
Adjustable Arms								
MRF122AWF	16–20.5"	16.25"	19.25"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"
Fixed Arms								
MRF122PWF	16–20.5"	16.25"	19.25"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"
No Arms								
MRF122NF	16–20.5"	16.25"	19.25"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"

Armpads Inside width ⁶	Armpads Outside width ⁶	Overall Height	Seat-to-Back Angle Range	Tilt Range ⁷ Back	Tilt Range ⁷ Seat	Armpad Height ⁸	Base Diameter Outside	Base Diameter Centerline	Weight ⁹ (Pounds)
14.3/20.5"	26.0/31.0"	42.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	6.0 – 11.5"	26.5"	25"	35
20"	28"	42.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	8.3"	26.5"	25"	35
N/A	N/A	42.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	N/A	26.5"	25"	33.5

Work Chairs: Standard-Height Range, Tilt Limiter, Flex Front™ Adjustable Seat Depth

Chair Description	Seat Height	Seat Depth	Seat Width ¹	Seat Pan Angle ²	Seat-to-Back Angle ³	Backrest Height	Lumbar Support ⁴	Back Width
Adjustable Arms								
MRF122AWA	16–20.5"	16.25 – 18"	19.5"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"
Fixed Arms								
MRF122PWA	16–20.5"	16.25 – 18"	19.5"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"
No Arms								
MRF122NA	16–20.5"	16.25 – 18"	19.5"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"

Armpads Inside width ⁶	Armpads Outside width ⁶	Overall Height	Seat-to-Back Angle Range	Tilt Range ⁷ Back	Tilt Range ⁷ Seat	Armpad Height ⁸	Base Diameter Outside	Base Diameter Centerline	Weight ⁹ (Pounds)
14.3/20.5"	26.0/31.0"	42.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	6.0 – 11.5"	26.5"	25"	34
20"	28"	42.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	8.3"	26.5"	25"	34
N/A	N/A	42.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	N/A	26.5"	25"	32.5

¹ Widest seat width.

² Neutral angle.

³ Stationary chair in neutral position.

⁴ Height range with lumbar pad in lowest position and highest position.

⁵ Minimum/maximum back width.

⁶ Minimum/maximum position for adjustable arms. (Adjustable arms can also pivot 20° inward and 20° outward.)

⁷ Neutral angle/reclined angle. ⁸ From seat height ⁹ With h-alloy base

Mirra® 2 Chairs
Methodology and Dimension Description

Standard-Height-Range Work Chairs with Standard Tilt (Seat height and overall height shown with 2 1/2" casters)

Work Chairs: Standard-Height Range, Standard Tilt, Fixed Seat Depth

Chair Description	Seat Height	Seat Depth	Seat Width ¹	Seat Pan Angle ²	Seat-to-Back Angle ³	Backrest Height	Lumbar Support ⁴	Back Width ⁵
Adjustable Arms								
MRF121AWF	16–20.5"	16.25"	19.25"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"
Fixed Arms								
MRF121PWF	16–20.5"	16.25"	19.25"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"
No Arms								
MRF121NF	16–20.5"	16.25"	19.25"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"

Armpads Inside ⁶	Armpads Outside ⁶	Overall Height	Seat-to-Back Angle Range	Tilt Range ⁷ Back	Tilt Range ⁷ Seat	Armpad Height ⁸	Base Diameter Outside	Base Diameter Centerline	Weight ⁹ (Pounds)
14.3/20.5"	26.0/31.0"	42.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	6.0 – 11.5"	26.5"	25"	35
20"	28"	42.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	8.3"	26.5"	25"	35
N/A	N/A	42.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	N/A	26.5"	25"	33.5

Work Chairs: Standard-Height Range, Standard Tilt, Flex Front™ Adjustable Seat Depth

Chair Description	Seat Height	Seat Depth	Seat Width ¹	Seat Pan Angle ²	Seat-to-Back Angle ³	Backrest Height	Lumbar Support ⁴	Back Width ⁵
Adjustable Arms								
MRF121AA	16–20.5"	6.25 – 18"	19.5"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"
Fixed Arms								
MRF121PA	16–20.5"	6.25 – 18"	19.5"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"
No Arms								
MRF121.NA	16–20.5"	6.25 – 18"	19.5"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"

Armpads Inside ⁶	Armpads Outside ⁶	Overall Height	Seat-to-Back Angle Range	Tilt Range ⁷ Back	Tilt Range ⁷ Seat	Armpad Height ⁸	Base Diameter Outside	Base Diameter Centerline	Weight ⁹ (Pounds)
14.3/20.5"	26.0/31.0"	42.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	6.0– 11.5"	26.5"	25"	34
20"	28"	42.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	8.3"	26.5"	25"	34
N/A	N/A	42.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	N/A	26.5"	25"	32

¹ Widest seat width.

² Neutral angle.

³ Stationary chair in neutral position.

⁴ Height range with lumbar pad in lowest position and highest position.

⁵ Minimum/maximum back width.

⁶ Minimum/maximum position for adjustable arms. (Adjustable arms can also pivot 20° inward and 20° outward.)

⁷ Neutral angle/reclined angle.

⁸ From seat height.

⁹ With h-alloy base

Mirra® 2 Chairs
Methodology and Dimension Description

Extended-Height-Range Work Chairs with Tilt Limiter and Seat Angle (Seat height and overall height shown with 2 1/2" casters)

Work Chairs: Extended-Height Range, Tilt Limiter and Seat Angle, Fixed Seat Depth

Chair Description	Seat Height	Seat Depth	Seat Width ¹	Seat Pan Angle ²	Seat-to-Back Angle ³	Backrest Height	Lumbar Support ⁴	Back Width ⁵
Adjustable Arms								
MRF133AWF	16.75–22.25"	16.25"	19.25"	-2.2/5°	96.4°	22.9"	4 1/2"	15.4/21.3"
Fixed Arms								
MRF133PWF	16.75–22.25"	16.25"	19.25"	-2.2/5°	96.4°	22.9"	4 1/2"	15.4/21.3"
No Arms								
MRF133NF	16.75–22.25"	16.25"	19.25"	-2.2/5°	96.4°	22.9"	4 1/2"	15.4/21.3"

Armpads Inside width ⁶	Armpads Outside width ⁶	Overall Height	Seat-to-Back Angle Range	Tilt Range ⁷ Back	Seat	Armpad Height ⁸	Base Diameter Outside	Base Diameter Centerline	Weight ⁹ (Pounds)
	26.0/31.0"			92.3/99.5/124°					
14.3/20.5"		43.75"	94.3 – 106.8°		-2.2/5.0/16.8°	6.0 – 11.5"	26.5"	25"	35
20"	28"	43.75"	94.3 – 106.8°		-2.2/5.0/16.8°	8.3"	26.5"	25"	35
N/A	N/A	43.75"	94.3 – 106.8°		-2.2/5.0/16.8°	N/A	26.5"	25"	33.5

Work Chairs: Extended-Height Range, Tilt Limiter and Seat Angle, Adjustable Seat Depth

Chair Description	Seat Height	Seat Depth	Seat Width ¹	Seat Pan Angle ²	Seat-to-Back Angle ³	Backrest Height	Lumbar Support ⁴	Back Width ⁵
Adjustable Arms								
MRF133AWA	16.75–22.25"	16.25 – 18"	19.5"	-2.2/5°	96.4°	22.9"	4 1/2"	15.4/21.3"
Fixed Arms								
MRF133PWA	16.75–22.25"	16.25 – 18"	19.5"	-2.2/5°	96.4°	22.9"	4 1/2"	15.4/21.3"
No Arms								
MRF133NA	16.75–22.25"	16.25 – 18"	19.5"	-2.2/5°	96.4°	22.9"	4 1/2"	15.4/21.3"

Armpads Inside width ⁶	Armpads Outside width ⁶	Overall Height	Seat-to-Back Angle Range	Tilt Range ⁷ Back	Seat	Armpad Height ⁸	Base Diameter Outside	Base Diameter Centerline	Weight ⁹ (Pounds)
	26.0/31.0"			92.3/99.5/124°					
14.3/20.5"		43.75"	94.3 – 106.8°		-2.2/5.0/16.8°	6.0 – 11.5"	26.5"	25"	34
20"	28"	43.75"	94.3 – 106.8°		-2.2/5.0/16.8°	8.3"	26.5"	25"	34
N/A	N/A	43.75"	94.3 – 106.8°		-2.2/5.0/16.8°	N/A	26.5"	25"	32.5

¹ Widest seat width.

² Forward angle/neutral angle.

³ Stationary chair in neutral position.

⁴ Height range with lumbar pad in lowest position and highest position.

⁵ Minimum/maximum back width.

⁶ Minimum/maximum position for adjustable arms. (Adjustable arms can also pivot 20° inward and 20° outward.).

⁷ Forward angle/neutral angle/reclined angle. ⁸ From seat height ⁹With h-alloy base

Mirra® 2 Chairs
Methodology and Dimension Description

Extended-Height-Range Work Chairs with Tilt Limiter (Seat height and overall height shown with 2 1/2" casters)

Work Chairs: Extended-Height Range, Tilt Limiter, Fixed Seat Depth

Chair Description	Seat Height	Seat Depth	Seat Width ¹	Seat Pan Angle ²	Seat-to-Back Angle ³	Backrest Height	Lumbar Support ⁴	Back Width ⁵
Adjustable Arms								
MRF132AWF	16.75–22.25"	16.25"	19.25"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"
Fixed Arms								
MRF132PWF	16.75–22.25"	16.25"	19.25"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"
No Arms								
MRF132NF	16.75–22.25"	16.25"	19.25"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"

Armpads Inside width ⁶	Armpads Outside width ⁶	Overall Height	Seat-to-Back Angle Range	Tilt Range ⁷ Back	Tilt Range ⁷ Seat	Armpad Height ⁸	Base Diameter Outside	Base Diameter Centerline	Weight ⁹ (Pounds)
14.3/20.5"	26.0/31.0"	43.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	6.0 – 11.5"	26.5"	25"	35
20"	28"	43.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	8.3"	26.5"	25"	35
N/A	N/A	43.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	N/A	26.5"	25"	33.5

Work Chairs: Extended-Height Range, Tilt Limiter, Flex Front™ Adjustable Seat Depth

Chair Description	Seat Height	Seat Depth	Seat Width ¹	Seat Pan Angle ²	Seat-to-Back Angle ³	Backrest Height	Lumbar Support ⁴	Back Width ⁵
Adjustable Arms								
MRF132AWA	16.75–22.25"	16.25 – 18"	19.5"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"
Fixed Arms								
MRF132PWA	16.75–22.25"	16.25 – 18"	19.5"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"
No Arms								
MRF132NA	16.75–22.25"	16.25 – 18"	19.5"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"

Armpads Inside width ⁶	Armpads Outside width ⁶	Overall Height	Seat-to-Back Angle Range	Tilt Range ⁷ Back	Tilt Range ⁷ Seat	Armpad Height ⁸	Base Diameter Outside	Base Diameter Centerline	Weight ⁹ (Pounds)
14.3/20.5"	26.0/31.0"	43.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	6.0 – 11.5"	26.5"	25"	34
20"	28"	43.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	8.3"	26.5"	25"	34
N/A	N/A	43.75"	96.4 – 105.4°	99.5/122.1°	5.0/16.8°	N/A	26.5"	25"	32.5

¹ Widest seat width.

² Neutral angle.

³ Stationary chair in neutral position.

⁴ Height range with lumbar pad in lowest position and highest position.

⁵ Minimum/maximum back width.

⁶ Minimum/maximum position for adjustable arms. (Adjustable arms can also pivot 20° inward and 20° outward.)

⁷ Neutral angle/reclined angle. ⁸ From seat height ⁹ With h-alloy base

Mirra® 2 Chairs
Methodology and Dimension Description

Extended-Height-Range Work Chairs with Standard Tilt (Seat height and overall height shown with 2 1/2" casters)

Work Chairs: Extended-Height Range, Standard Tilt, Fixed Seat Depth

Chair Description	Seat Height	Seat Depth	Seat Width ¹	Seat Pan Angle ²	Seat-to-Back Angle ³	Backrest Height	Lumbar Support ⁴	Back Width ⁵
Adjustable Arms								
MRF131AWF	16.75–22.25"	16.25"	19.25"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"
Fixed Arms								
MRF131PWF	16.75–22.25"	16.25"	19.25"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"
No Arms								
MRF131NF	16.75–22.25"	16.25"	19.25"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"

Armpads Inside ⁶	Armpads Outside ⁶	Overall Height	Seat-to-Back Angle Range	Tilt Range ⁷ Back	Seat	Armpad Height ⁸	Base Diameter Outside	Centerline	Weight ⁹ (Pounds)
	26.0/31.0"	43.75"		99.5/122.1°					
14.3/20.5"			96.4 – 105.4°		5.0/16.8°	6.0 – 11.5"	26.5"	25"	35
	28"	43.75"		99.5/122.1°					
20"			96.4 – 105.4°		5.0/16.8°	8.3"	26.5"	25"	35
	N/A	43.75"		99.5/122.1°					
N/A			96.4 – 105.4°		5.0/16.8°	N/A	26.5"	25"	33.5

Work Chairs: Extended-Height Range, Standard Tilt, Flex Front™ Adjustable Seat Depth

	Seat Height	Seat Depth	Seat Width ¹	Pan e ²	Seat-to-Back Angle ³	Backrest Height	Lumbar Support ⁴	Back Width
Adjustable Arms								
MRF131AA	16.75–22.25"	16.25 – 18"	5"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"
Fixed Arms								
MRF131PA	16.75–22.25"	16.25 – 18"	5"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"
No Arms								
MRF131NA	16.75–22.25"	16.25 – 18" 19.	5"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"

Armpads Inside ⁶	Armpads Outside ⁶	Overall Height	Seat-to-Back Angle Range	Tilt Range ⁷ Back Out	Seat	Armpad Height ⁸	Base Diameter side	Centerline	Weight ⁹ Lbs.
	26.0/31.0"	43.75"		99.5/122.1°					
14.3/20.5"			96.4 – 105.4°		5.0/16.8°	6.0 – 11.5"	26.5"	25"	34
	28"	43.75"		99.5/122.1°					
20"			96.4 – 105.4°		5.0/16.8°	8.3"	26.5"	25"	34
	N/A	43.75"	96.4	99.5/122.1°					
N/A					5.0/16.8°		26.5"	25"	32

¹ Widest seat width.

² Neutral angle.

³ Stationary chair in neutral position.

⁴ Height range with lumbar pad in lowest position and highest position.

⁵ Minimum/maximum back width.

⁶ Minimum/maximum position for adjustable arms. (Adjustable arms can also pivot 20° inward and 20° outward.)

⁷ Neutral angle/reclined angle.

⁸ From seat height

⁹ With h-alloy base

Mirra® 2 Chairs
Methodology and Dimension Description

Stools with Tilt Limiter and Seat Angle (Seat height and overall height shown with 2 1/2" casters)

Stools: Tilt Limiter and Seat Angle, Fixed Seat Depth									
Chair Description	Seat Height	Seat Depth	Seat Width ¹	Seat Pan Angle ²	Seat-to-Back Angle ³	Backrest Height	Lumbar Support ⁴	Back Width ⁵	
Adjustable Arms									
MRF753AWF	23.5–33.5"	16.25"	19.25"	-2.2/5°	96.4°	22.9"	4 1/2"	15.4/21.3"	
Fixed Arms									
MRF753PWF	23.5–33.5"	16.25"	19.25"	-2.2/5°	96.4°	22.9"	4 1/2"	15.4/21.3"	
No Arms									
MRF753NNF	23.5–33.5"	16.25"	19.25"	-2.2/5°	96.4°	22.9"	4 1/2"	15.4/21.3"	
Armpads Inside width ⁶	Armpads Outside width ⁶	Overall Height	Seat-to-Back Angle Range	Tilt Range ⁷ Back	Armpad Height ⁸	Base Diameter Outside	Weight (Pounds)		
14.3/20.5"	26.0/31.0"	55.25"	94.3 – 102°	92.3/99.5/113°	-2.2/5.0/16.8°	6.0 – 11.5"	26.5"	25"	43
20"	28"	55.25"	94.3 – 102°	92.3/99.5/113°	-2.2/5.0/16.8°	8.3"	26.5"	25"	41
N/A	N/A	55.25"	94.3 – 102°	92.3/99.5/113°	-2.2/5.0/16.8°	N/A	26.5"	25"	40.5

Stools: Tilt Limiter and Seat Angle, FlexFront Adjustable Seat Depth									
Chair Description	Seat Height	Seat Depth	Seat Width ¹	Seat Pan Angle ²	Seat-to-Back Angle ³	Backrest Height	Lumbar Support ⁴	Back Width ⁵	
Adjustable Arms									
MRF753AWA	23.5–33.5"	16.25 – 18"	19.5"	-2.2/5°	96.4°	22.9"	4 1/2"	15.4/21.3"	
Fixed Arms									
MRF753PWA	23.5–33.5"	16.25 – 18"	19.5"	-2.2/5°	96.4°	22.9"	4 1/2"	15.4/21.3"	
No Arms									
MRF753NNA	23.5–33.5"	16.25 – 18"	19.5"	-2.2/5°	96.4°	22.9"	4 1/2"	15.4/21.3"	
Armpads Inside width ⁶	Armpads Outside width ⁶	Overall Height	Seat-to-Back Angle Range	Tilt Range ⁷ Back	Armpad Height ⁸	Base Diameter Outside	Weight (Pounds)		
14.3/20.5"	26.0/31.0"	42.75"	94.3 – 102°	92.3/99.5/113°	-2.2/5.0/16.8°	6.0 – 11.5"	26.5"	25"	44
20"	28"	42.75"	94.3 – 102°	92.3/99.5/113°	-2.2/5.0/16.8°	8.3"	26.5"	25"	42
N/A	N/A	42.75"	94.3 – 102°	92.3/99.5/113°	-2.5/5.0/16.8°	N/A	26.5"	25"	41.5

¹ Widest seat width.

² Forward angle/neutral angle.

³ Stationary chair in neutral position.

⁴ Height range with lumbar pad in lowest position and highest position.

⁵ Minimum/maximum back width.

⁶ Minimum/maximum position for adjustable arms. (Adjustable arms can also pivot 20° inward and 20° outward.)

⁷ Forward angle/neutral angle/reclined angle. ⁸ From seat height

Mirra® 2 Chairs
Methodology and Dimension Description

Stools: Tilt Limiter, Fixed Seat Depth

Chair Description	Seat Height	Seat Depth	Seat Width ¹	Seat Pan Angle ²	Seat-to-Back Angle ³	Backrest Height	Lumbar Support ⁴	Back Width ⁵	
Adjustable Arms									
MRF752AWF	23.5–33.5"	16.25"	19.25"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"	
Fixed Arms									
MRF752PWF	23.5–33.5"	16.25"	19.25"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"	
No Arms									
MRF752NNF	23.5–33.5"	16.25"	19.25"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"	
Armpads Inside width ⁶	Armpads Outside width ⁶	Overall Height	Seat-to-Back Angle Range	Tilt Range ⁷ Back Seat		Armpad Height ⁸	Base Diameter Outside Centerline		Weight (Pounds)
14.3/20.5"	26.0/31.0"	55.25"	96.4 – 102°	99.5/113°	5.0/16.8°	6.0 – 11.5"	26.5"	25"	43
20"	28"	55.25"	96.4 – 102°	99.5/113°	5.0/16.8°	8.3"	26.5"	25"	41
N/A	N/A	55.25"	96.4 – 102°	99.5/113°	5.0/16.8°	N/A	26.5"	25"	40.5

Stools: Tilt Limiter, FlexFront™ Adjustable Seat Depth

Chair Description	Seat Height	Seat Depth	Seat Width ¹	Seat Pan Angle ²	Seat-to-Back Angle ³	Backrest Height	Lumbar Support ⁴	Back Width	
Adjustable Arms									
MRF752AWA	23.5–33.5"	16.25 – 18"	19.5"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"	
Fixed Arms									
MRF752PWA	23.5–33.5"	16.25 – 18"	19.5"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"	
No Arms									
MRF752NNA	23.5–33.5"	16.25 – 18"	19.5"	5°	96.4°	22.9"	4 1/2"	15.4/21.3"	
Armpads Inside width ⁶	Armpads Outside width ⁶	Overall Height	Seat-to-Back Angle Range	Tilt Range ⁷ Back Seat		Armpad Height ⁸	Base Diameter Outside Centerline		Weight (Pounds)
14.3/20.5"	26.0/31.0"	23.5–33.5"	96.4 – 102°	99.5/113°	5.0/16.8°	6.0 – 11.5"	26.5"	25"	44
20"	28"	23.5–33.5"	96.4 – 102°	99.5/113°	5.0/16.8°	8.3"	26.5"	25"	42
N/A	N/A	23.5–33.5"	96.4 – 102°	99.5/113°	5.0/16.8°	N/A	26.5"	25"	41.5

¹ Widest seat width.

² Neutral angle.

³ Stationary chair in neutral position.

⁴ Height range with lumbar pad in lowest position and highest position.

⁵ Minimum/maximum back width.

⁶ Minimum/maximum position for adjustable arms. (Adjustable arms can also pivot 20° inward and 20° outward.) ⁷ Neutral angle/reclined angle. ⁸ From seat height

Description	MRF111	MRF131
	MRF112	MRF132
	MRF113	MRF133
	MRF121	
	MRF122	
	MRF123	

This chair has 2 backrest options. The Butterfly Back™ creates an intelligent support structure for the user’s entire back. It utilizes a new method for merging a fabric layer with flexible polymer shell. The Triflex™ back is 100% polymer, no fabric, with a similar design that offers flexible and continuous support. These options, combined with the new loop spine design and passive PostureFit® sacral support allow for a new level of personal contouring and micro-motion support. The AireWeave™ 2 seat-suspension material is lightweight and breathable and evenly distributes the user’s weight over the seat of the chair. The chair’s Harmonic™ 2 tilt provides continuous balance and lets the body recline naturally, pivoting at the ankles, knees, and hips. The chair has a 5-star base offered in two design profiles and 3 height adjustment options. The low- height option has a seat-height range of 14 3/4" to 19"; the standard-height option has a seat- height range of 16" to 20 1/2"; and the extended-height option has a seat-height range of 16 3/4" to 22 1/4".

Tilt options include a standard tilt, tilt limiter, and tilt limiter and seat angle. The tilt limiter allows the user to set the tilt range to limit the amount of recline. The tilt limiter and seat angle allows the user to set the tilt range and select a 5° forward seat angle.

Back support options include a standard fixed lumbar version and a user-adjustable lumbar support version. The adjustable lumbar support adjusts 4 1/2" in height and 1" in depth. Both back options include passive PostureFit at the base of the back, below the beltline, that helps achieve healthier posture and improved lower back comfort.

The chair’s Butterfly Back is specified with a Latitude™ fabric color that corresponds to the polymer back shell colors. The applied fabric is on the front side of the backrest and allows flexible support and airflow. Fabric cannot be applied to the chair’s AireWeave seat.

Seat options include a 16 1/4" fixed seat depth or a FlexFront® seat depth that allows the user to adjust the seat depth from 16 1/4" to 18".

Arm choices include no arms, fixed arms, or 4-dimensional adjustable arms that adjust the arms 5 1/2" vertically, 1 1/8" horizontally, 2" front-to-back, and pivot the armpads 20° outward and 20° inward.

The Mirra 2 chair shall meet the California Technical Bulletin 117-2013 fire safety standard and ANSI/BIFMA X5.1-2017 General Purpose Office Chairs.

Chair is tested and warranted for use by persons 350 pounds and under.

Construction	Seat
	<p>The separate seat shall be a durable, breathable AireWeave material stretched within a carrier ring and fitted into an outer frame. The AireWeave material shall be a woven blend and a solution-dyed polyester yarn. It shall support and distribute the user’s weight evenly over the seat of the chair and shall retain its original shape when the chair is unoccupied.</p>

The carrier ring shall be a thermoplastic co-polyester based elastomer (TPE) molded around the perimeter of the AireWeave material to frame and support it. The seat support shall be made from injection-molded, glass reinforced thermoplastic Nylon 6.

For seats with FlexFront adjustable seat depth, the flexible portion of the seat support shall be Nylon 6.

Back

The separate molded back shall be a durable polypropylene attached to a loop-shaped support spine made from glass-filled Nylon 6. It shall support and distribute the user's weight evenly over the entire back of the chair and shall retain its original shape when the chair is unoccupied. The molded back and support spine shall be secured together with screws.

The molded back/loop-shaped support spine assembly shall be secured to the tilt mechanism with bolts.

Chairs without optional lumbar support shall have fixed back support, made from glass filled polypropylene (GFPP), and attached to the spine.

Lumbar Pad (Optional)

The lumbar strap shall be a molded polypropylene thermoplastic secured to a bow-shaped attachment. The bow-shaped attachment (a.k.a. lumbar bow) shall be molded-in nylon. The pad shall be approximately .130" thick. The handles of the lumbar support shall be made from glass filled nylon (GFPA).

See "Adjustments" for lumbar adjustments.

Butterfly Back™ Upholstered Back

The upholstery shall be a 3-dimensional knit fabric of breathable, 100% virgin polyester.

Arms (Optional)

The work chair shall be available with no arms, fixed arms, or adjustable arms. Adjustable arm shall have an armpad support and arm stem of glass-filled nylon. Fixed arm shall have an armpad support of glass filled nylon (GFPA) and arm stem of aluminum. An armpad support shall attach to the arm stem with a screw. See "Adjustments" for adjustable-arm ranges.

Chairs shall have 10"-by-4 3/4" armpads of urethane foam molded in place to nylon armpad insert on the armpad support. Armpads shall be molded, textured, flexible urethane. Armpads shall not contain flame retardants.

Tilt

The tilt mechanism shall be 2 fiberglass leaf springs, a gear-driven tension adjustment, and a cast aluminum housing. A 3-piece, polycarbonate ABS blend cover shall snap together to enclose the tilt mechanism.

The tilt limiter lever and the seat angle adjustment lever (2 levers), which extend from the left side of the tilt, shall be glass-filled nylon.

The tilt tension adjustment shaft, which extends from the right side of the tilt, shall be steel with an overmolded glass filled nylon handle and soft, textured, molded tilt-tension knob of Sanoprene outer skin.

*Construction
continued*

Base

The chair base shall house a unitized single-stage pneumatic seat height adjustment mechanism contained in 2 steel tubes; an inner tube shall slide and rotate in a bushing within an outer tube. The outer tube shall be coated black and shall have a tapered end that shall be pressed into the base, and an upper end that shall be pressed into the tilt mechanism.

See “Adjustments” for tilt and seat-height ranges.
Pneumatic cylinders can be replaced on site. (See *Service Parts* in Kiosk.)

The 5-star base shall be injection molded glass-filled nylon (with fog and graphite finishes) or cast aluminum (h-alloy and semi-polished finishes). The chair shall swivel 360°.

Chairs shall be furnished with interchangeable casters. See the “Casters and Glides” section for more information.

Adjustments

Lumbar Pad (Optional)

To adjust the height of the optional lumbar pad, turn the lumbar knobs upward, and slide the lumbar support up and down within a 4 1/2” range. To increase lumbar support, within a 1” range, rotate lumbar knobs up or down.

Seat Height

Seat height shall be controlled by a glass-filled Nylon 6 lever mounted to the right side of the tilt.

The approximate seat height range shall be 16 to 20 1/2” for standard-height-range pneumatic chairs.

Tilt

The Harmonic™ tilt shall let the user’s body pivot at the ankles, knees, and hips.

The back-to seat tilt ratio shall be 2° to 1° when the chair is reclined from a neutral angle.

Back Recline

Chairs with a standard tilt (MRF111 and MRF121) shall have a nominal 22° of body weight-controlled back recline. Chairs with a tilt limiter (MRR112 and MRR122) shall have a nominal 22° of body weight-controlled back recline and a tilt limiter that lets users limit the amount of back recline in 3 incremental adjustments. Chairs with a tilt limiter and seat angle adjustment (MRF113 and MRF123) shall have a nominal 26° of body weight-controlled back recline and a tilt limiter that lets users limit the amount of back recline in 4 incremental adjustments.

Seat Angle Adjustment

Chairs with a tilt limiter and seat angle adjustment (MRF113 and MRF123) shall let the user select a +1.5° horizontal or –2.5° forward seat angle.

Adjustable Arms (Optional)

The adjustable arms shall have an injection-molded glass-filled Nylon 6 tab to let the user loosen the arm height mechanism. The arm height adjustment range shall be approximately 5 1/2".

The arm width adjustment range shall be approximately 1 1/8".

The fore and aft armpad adjustment shall be 2".

The adjustable arms shall have a plastic plate with detents to allow the arm support to pivot to 3 different positions. The arm shall be adjustable to 20° outward, neutral, and 20° inward angles by applying pressure to the side of the arm. Detents within the arm assembly shall hold the arms in position.

**Performance
Data**

The chair shall be rated to support a maximum of 350 pounds. The chair shall accommodate the 5th percentile female to the 95th percentile male (combination of low and standard height range).

The Mirra 2 chair shall meet the California Technical Bulletin 117-2013 fire safety standard and ANSI/BIFMA X5.1-2017 General Purpose Office Chairs.

See the "Seating Measurements" chart for chair dimensions.

Description	<p>MRF752 MRF753</p> <p>This stool has a 5-star base and 1 height cylinder with a seat height range of 231/2" to 331/2".</p> <p>The stool has 2 backrest options. The Butterfly Back™ creates an intelligent support structure for the user's entire back. It utilizes a new method for merging a fabric layer with flexible polymer shell. The TriFlex™ 2 back is 100% polymer, no fabric, with a similar design that offers flexible and continuous support. These options, combined with the loop spine design and passive PostureFit® sacral support allow for a new level of personal contouring and micro-motion support, with the Butterfly Back offering the highest level of comfort. The AireWeave™ seat-suspension material is lightweight and breathable and evenly distributes the user's weight over the seat of the stool. The stool's Harmonic™ 2 tilt provides continuous balance and lets the body recline naturally, pivoting at the ankles, knees, and hips.</p> <p>Tilt options include a tilt limiter, and tilt limiter and seat angle. The tilt limiter allows the user to set the tilt range to limit the amount of recline. The tilt limiter and seat angle allows the user to set the tilt range and select a 5° forward seat angle.</p> <p>Back support options include a standard fixed lumbar version and a user-adjustable lumbar support version. The adjustable lumbar support adjusts 41/2" in height and 1" in depth. Both back options include passive PostureFit at the base of the back, below the beltline, that helps achieve healthier posture and improved lower back comfort.</p> <p>The stool's Butterfly Back is specified with a Latitude™ fabric color that corresponds to the polymer back shell colors. The applied fabric is on the front side of the backrest and allows flexible support and airflow. Fabric cannot be applied to the stool's AireWeave seat.</p> <p>Seat options include a 161/4" fixed seat depth or a FlexFront® seat depth that allows the user to adjust the seat depth from 161/4" to 18".</p> <p>Arm choices include no arms, fixed arms, or 4-dimensional adjustable arms that adjust the arms 51/2" vertically, 11/8" horizontally, 2" front-to-back, and pivot the armpads 20° outward and 20° inward.</p>
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Construction	<p>Seat</p> <p>The separate seat shall be a durable, breathable AireWeave material stretched within a carrier ring and fitted into an outer frame. The AireWeave material shall be a woven blend and a solution-dyed polyester yarn. It shall support and distribute the user's weight evenly over the seat of the stool and shall retain its original shape when the stool is unoccupied.</p> <p>The carrier ring shall be a thermoplastic co-polyester based elastomer (TPE) molded around the perimeter of the AireWeave material to frame and support it. The seat support shall be made from injection-molded, glass reinforced thermoplastic Nylon 6.</p> <p>For seats with FlexFront adjustable seat depth, the flexible portion of the seat support shall be Nylon 6.</p> <p>Back</p> <p>The separate molded back shall be a durable polypropylene attached to a loop-shaped support spine made from glass-filled Nylon 6. It shall support and distribute the user's weight evenly over the entire back of the stool and shall retain its original shape when the stool is unoccupied. The molded back and support spine shall be secured together with screws.</p> <p>The molded back/loop-shaped support spine assembly shall be secured to the tilt mechanism with bolts.</p>
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Stools without optional lumbar support shall have fixed back support, made from glass filled polypropylene (GFPP), and attached to the spine.

Lumbar Pad (Optional)

The lumbar strap shall be a molded polypropylene thermoplastic secured to a bow-shaped attachment. The bow-shaped attachment (a.k.a. lumbar bow) shall be molded-in nylon. The pad shall be approximately .130" thick. The handles of the lumbar support shall be made from glass filled nylon (GFPA).

See "Adjustments" for lumbar adjustments.

Butterfly Back™ Upholstered Back

The upholstery shall be a 3-dimensional knit fabric of breathable, 100% virgin polyester.

Arms (Optional)

The stool shall be available with no arms, fixed arms, or adjustable arms. Adjustable arm shall have an armpad support and arm stem of glass-filled nylon. Fixed arm shall have an armpad support of glass filled nylon (GFPA) and arm stem of aluminum. An armpad support shall attach to the arm stem with a screw. See "Adjustments" for adjustable-arm ranges.

Stools shall have 10"-by-4 3/4" armpads of urethane foam molded in place to nylon armpad insert on the armpad support. Armpads shall be molded, textured, flexible urethane, and contain no flame retardant chemicals.

Tilt

The tilt mechanism shall be 2 fiberglass leaf springs, a gear-driven tension adjustment, and a cast aluminum housing. A 3-piece, polycarbonate ABS blend cover shall snap together to enclose the tilt mechanism.

The tilt limiter lever and the seat angle adjustment lever (2 levers), which extend from the left side of the tilt, shall be glass-filled nylon.

The tilt tension adjustment shaft, which extends from the right side of the tilt, shall be steel with an overmolded glass filled nylon handle and soft, textured, molded tilt-tension knob of Sanoprene outer skin.

Base

The stool base shall house a unitized single-stage pneumatic seat height adjustment mechanism contained in 2 steel tubes; an inner tube shall slide and rotate in a bushing within an outer tube. The outer tube shall be coated black and shall have a tapered end that shall be pressed into the base, and an upper end that shall be pressed into the tilt mechanism.

See "Adjustments" for tilt and seat-height ranges.

Pneumatic cylinders can be replaced on site. (See *Service Parts* in Kiosk.)

The 5-star base shall be injection molded glass-filled nylon (with fog and graphite finishes) or cast aluminum (h-alloy and semi-polished finishes). The stool shall swivel 360°.

Stools shall be furnished with interchangeable casters. See the "Casters and Glides" section for more information.

Footrest Assembly

Stools shall be furnished with a user adjustable footrest assembly. The footrest assembly is constructed of an aluminum die cast spoke, tubular steel foot ring with trivalent chrome finish, and integral locking mechanism.

Stool**Adjustments****Lumbar Pad (Optional)**

To adjust the height of the optional lumbar pad, turn the lumbar knobs upward, and slide the lumbar support up and down within a 4 1/2" range. To increase lumbar support, within a 1" range, rotate lumbar knobs up or down.

Seat Height

Seat height shall be controlled by a glass-filled Nylon 6 lever mounted to the right side of the tilt.

The approximate seat height range shall be 16 to 20 1/2" for standard-height-range pneumatic stools.

Tilt

The Harmonic™ tilt shall let the user's body pivot at the ankles, knees, and hips.

The back-to seat tilt ratio shall be 2° to 1° when the stool is reclined from a neutral angle.

Back Recline

Stools with a tilt limiter (MRF752) shall have a nominal 13° of body weight-controlled back recline and a tilt limiter that lets users limit the amount of back recline in 2 incremental adjustments. Stools with a tilt limiter and seat angle adjustment (MRF753) shall have a nominal 21° of body weight-controlled back recline and a tilt limiter that lets users limit the amount of back recline in 3 incremental adjustments.

Seat Angle Adjustment

Stools with a tilt limiter and seat angle adjustment (MRF753) shall let the user select a +1.5° horizontal or -2.5° forward seat angle.

Adjustable Arms (Optional)

The adjustable arms shall have an injection-molded glass-filled Nylon 6 tab to let the user loosen the arm height mechanism. The arm height adjustment range shall be approximately 5 1/2".

The arm width adjustment range shall be approximately 1 1/8".

The fore and aft armpad adjustment shall be 2".

The adjustable arms shall have a plastic plate with detents to allow the arm support to pivot to 3 different positions. The arm shall be adjustable to 20° outward, neutral, and 20° inward angles by applying pressure to the side of the arm. Detents within the arm assembly shall hold the arms in position.

Footrest Assembly

The footrest assembly is height adjustable with a range of 4 1/2".

Performance Data

The stool shall be rated to support a maximum of 350 pounds.

The Mirra 2 chair shall meet the California Technical Bulletin 117-2013 fire safety standard and ANSI/BIFMA X5.1-2017 General Purpose Office Chairs.

See the "Seating Measurements" chart for stool dimensions.

Description	MRF910	
	This back replaces an existing back on a Mirra® 2 work chair or stool.	
Dimensions	Backrest Height	Minimum Back Width
	22.9"	15.4"

Construction	The upholstery shall be a 3-dimensional knit fabric of breathable, 100% virgin polyester. The back utilizes a new method for merging a fabric layer with flexible polymer shell.
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Description **MRF905**

This adjustable lumbar support fits into the back of a Mirra® 2 work chair or stool replacing a fixed lumbar.

Dimensions	Height Range
	4.5"

Construction The lumbar strap shall be a molded polypropylene thermoplastic secured to a bow-shaped attachment. The bow-shaped attachment (a.k.a. lumbar bow) shall be molded-in nylon and shall attach to the loop-shaped spine. The pad shall be approximately .130" thick. The handles of the lumbar support shall be made from glass filled nylon.

Description	MRF900
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These arms retrofit to a no arm or fixed arm Mirra® 2 work chair or stool.

Dimensions	Armpad Width	Armpad Depth
	4.3"	10"

Construction	<p>The adjustable arms shall have an injection-molded glass-filled Nylon 6 tab to let the user loosen the arm height mechanism. The arm height adjustment range shall be approximately 5 1/2".</p> <p>The arm width adjustment range shall be approximately 1 1/8".</p> <p>The armpad shall adjust fore and aft 2".</p> <p>The adjustable arms shall have a plastic plate with detents to allow the arm support to pivot to 3 different positions. The arm shall be adjustable to 20° outward, neutral, and 20° inward angles by applying pressure to the side of the arm. A detent within the arm assembly shall hold the arms in position.</p>
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Casters and Glides

Casters	Size (Diameter)	Type	Materials	Use
BB	2 1/2"	hard double wheels	black nylon wheels and yoke	carpet
C7	2 1/2"	double wheels	black nylon wheels and yoke, soft polyurethane tread	hard floors or carpet
C9	2 1/2"	double wheels with internal brake	black nylon wheels and yoke, soft polyurethane tread	hard floors or carpet
SC8	2 1/2"	double wheels with Quiet roll technology	black nylon wheels and yoke, soft polyurethane tread	hard floors or carpet
Glides	Size		Materials	Use
GF	2 1/2" height		black nylon	hard floors or carpet