



26 July 2022
Ref: 22197 V2

Product Design Assessment

for

Office Pod Assessment
M-Pod & D-Pod

prepared for

Inapod Pty Ltd



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Report Version Control

Version Ref No.	Purpose / Changes	Author	Reviewer	Date
22197 PA	Report Issue	Catherine Roberts	Mark Krause	12/07/2022
22197 V2	Report Issue	Bruce Bromley	Bruce Bromley	26/07/2022

Overview

Equal Access, accredited disability access consultants, has been commissioned by Inapod Pty Ltd to undertake a technical assessment of the M-Pod and the D-Pod (part of the office pod series) against the requirements of the Disability Discrimination Act 1992 (as amended) and associated legislation.

Referenced Documentation

This report references the following documents:

- *Commonwealth Disability Discrimination Act 1992 (DDA)*
- *Commonwealth Disability (Access to Premises – Buildings) Standards 2010 (Premises Standards)*
- *Building Code of Australia 2019 Volume One Amendment 1 (BCA)*
- *Australian Standard AS 1428.1:2009 – Design for access and mobility, Part 1: General requirements for access – New building work (AS 1428.1)*

Scope of Report

Inapod Pty Ltd has recognised the importance of providing compliant products that meet the requirements of the BCA and AS 1428.1 for commercial projects. They have requested Equal Access assess the M-Pod and D-Pod products in the office pod series for compliance and make recommendations should any non-compliance be identified.

Section D3 of both the Disability (Access to Premises – Buildings) Standards 2010 (Premises Standards) and Building Code of Australia 2019 (the BCA) require buildings to be accessible for people with disability. Accessways, where required under the Premises Standards and the BCA, must comply with the provisions of AS 1428.1, including (but not limited to) paths of travel complying with AS 1428.1 Clause 6, walkways and ramps complying with AS 1428.1 Clause 10, and doors complying with AS 1428.1 Clause 13.

Design Assessment – M-Pod & D-Pod

'Deemed-to-Satisfy' Provisions

The 'Deemed-to-Satisfy' provisions for the M-Pod and D-Pod, when installed in parts of buildings required to be accessible under Table D3.1 of the BCA and Premises Standards, from within AS 1428.1–2009 are as follows:

AUSTRALIAN STANDARD AS 1428.1:2009

6 CONTINUOUS ACCESSIBLE PATHS OF TRAVEL

6.1 General

A continuous accessible path of travel shall not include a step, stairway, turnstile, revolving door, escalator, moving walk or other impediment.

6.2 Heights of a continuous accessible path of travel

The minimum unobstructed height of a continuous accessible path of travel shall be 2000 mm or 1980 mm at doorways (see Figure 2).

6.3 Width of a continuous accessible path of travel

Unless otherwise specified (such as at doors, curved ramps and similar), the minimum unobstructed width (see Figure 2) of a continuous accessible path of travel shall be 1000 mm and the following shall not intrude into the minimum unobstructed width of a continuous accessible path of travel:

(a) Fixtures and fittings such as lights, awnings, windows that, when open, intrude into the circulation space, telephones, skirtings and similar objects.

(b) Essential fixtures and fittings such as fire hose reels, fire extinguishers and switchboards.

(c) Door handles less than 900 mm above the finished floor level.

6.5 Circulation space for wheelchair turn

6.5.3 >90° to 180°

The space required for a wheelchair to make a >90° to 180° turn shall be not less than 2070 mm in the direction of travel and not less than 1540 mm wide, as shown in Figure 5.

NOTE: For landing dimensions, see Clause 10.8.

6.6 Visual indicators on glazing

Where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights, including any glazing capable of being mistaken for a doorway or opening, shall be clearly marked for their full width with a solid and non-transparent contrasting line. The contrasting line shall be not less than 75 mm wide and shall extend across the full width of the glazing panel. The lower edge of the contrasting line shall be located between 900 mm and 1000 mm above the plane of the finished floor level.

Any contrasting line on the glazing shall provide a minimum of 30% luminance contrast when viewed against the floor surface or surfaces within 2 m of the glazing on the opposite side.

10 WALKWAYS, RAMPS AND LANDINGS

10.1 General

Walkways, ramps and landings that are provided on a continuous accessible path of travel shall be as follows:

- (a) Sharp transitions shall be provided between the planes of landings and ramps, as shown in Figure 14.*
- (b) Landings shall be provided at all changes in direction in accordance with Clause 10.8.*
- (c) Landing or circulation space shall be provided at every doorway, gate, or similar opening.*
- (d) For walkways and landings having gradients in the direction of travel shallower than 1 in 33, a camber or crossfall shall be provided for shedding of water and shall be no steeper than 1 in 40, except that bitumen surfaces shall have a camber or crossfall no steeper than 1 in 33.*

10.5 Threshold ramps

Threshold ramps at doorways on a continuous path of travel shall have—

- (a) a maximum rise of 35 mm;*
- (b) a maximum length of 280 mm;*
- (c) a maximum gradient of 1:8; and*
- (d) be located within 20 mm of the door leaf which it serves, as shown in Figure 21.*

The edges of the threshold ramp shall be tapered or splayed at a minimum of 45° where the ramp does not abut a wall.

10.6 Step ramps

10.6.1 General

Step ramps shall have—

- (a) a maximum rise of 190 mm;*
- (b) a length not greater than 1900 mm; and*
- (c) a gradient not steeper than 1 in 10.*

Step ramps shall be as shown in Figures 22(A) and 22(B), as appropriate.

The edges of step ramp shall have a 45° splay where there is pedestrian cross traffic. Otherwise, it shall be protected by a suitable barrier, as shown in Figure 22(B), such as—

- (i) a wall or suitable barrier with a minimum height of 450 mm; or*
- (ii) where an open balustrade is provided a kerb or kerb rail shall be provided.*

10.6.2 Finishes

Step ramps shall have a slip-resistant surface.

10.8 Landings

10.8.2 Step ramps

The length of landings at step ramps shall be not less than 1200 mm in the direction of travel, as shown in Figures 22(A) and 22(B).

Where a change in direction is required, the length of step ramp landings shall be a minimum of 1500 mm, as shown in Figure 22(A).

Where doorways are at landings, the dimensions of the landings shall be in accordance with the requirements of Clause 13.3 for circulation spaces at doorways shown in Figure 25(D).

13 DOORWAYS, DOORS AND CIRCULATION SPACE AT DOORWAYS

13.1 Luminance contrast

All doorways shall have a minimum luminance contrast of 30% provided between—

- (a) door leaf and door jamb;*
- (b) door leaf and adjacent wall;*
- (c) architrave and wall;*
- (d) door leaf and architrave; or*
- (e) door jamb and adjacent wall.*

The minimum width of the area of luminance contrast shall be 50 mm.

13.2 Clear opening of doorways

The minimum clear opening of a doorway on a continuous accessible path of travel shall be 850 mm when measured from the face of the opened door to the doorstop, as shown in Figure 30. Where double doors are used, the 850 mm minimum clear opening shall apply to the active leaf.

13.3 Circulation spaces at doorways on a continuous accessible path of travel

13.3.1 General

Circulation spaces shall be provided at every doorway, gate, or similar entry way, on a continuous accessible path of travel.

Circulation spaces at doorways shall have a gradient and crossfall not steeper than 1 in 40.

Doorway circulation spaces shall be used in combination to allow access through doorways in both directions, as shown in Figures 31 and 32.

The dimensions shall also apply in mirror image configurations. Where clear doorway openings are intermediate to those shown in Figures 31 and 32 then the required circulation spaces shall be interpolated.

13.3.2 Swinging doors

The clear circulation space at doorways with swinging doors is based on the clear opening width of the doorway (D). The clear circulation space shall be not less than the dimensions specified in the tables of Figure 31 for the appropriate clear opening width.

13.5 Door controls

13.5.1 General

Door controls in, or forming part of, the continuous accessible path of travel shall comply with the requirements of this Clause.

13.5.2 Design and performance

Door handles and related hardware and accessories shall comply with the following:

- (a) The door handle and related hardware shall be of the type that allows the door to be unlocked and opened with one hand. The handle shall be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch.*
- (b) The clearance between the handle and the back plate or door face at the centre grip section of the handle shall be not less than 35 mm and not more than 45 mm.*
- (c) 'D' type handles shall be provided on sliding doors.*
- (d) Where snibs are installed, they shall have a lever handle of a minimum length of 45 mm from the centre of the spindle.*
- (e) For doors other than fire doors and smoke doors where a door closer is fitted, the force required at the door handle to operate the door shall not exceed the following:*
 - (i) To initially open the door..... 20 N*
 - (ii) To swing or slide the door.....20 N.*
 - (iii) To hold the door open between 60° and 90°.....20 N.*
- (f) Where an outward opening door is not self-closing, a horizontal handrail or pull bar shall be fixed on the closing face of a side-hung door, as shown in Figure 36.*

13.5.3

Location

Except in early childhood centres, swimming pool barriers or similar situations

where the location of the opening and locking controls is prescribed by the relevant statutory authority, the location of the controls for doors and gates shall be above a level surface and as follows:

- (a) Controls that need to be grasped or turned shall be not less than 900 mm and not more than 1100 mm above the plane of the finished floor, as shown in Figure 36.*
- (b) Controls that only need to be pushed, such as panic bars on egress routes, shall be not less than 900 mm, and not greater than 1200 mm above the plane of the finished floor.*
- (c) Controls that only need to be touched shall be not less than 900 mm, and not greater than 1250 mm above the plane of the finished floor, and not less than 500 mm from an internal corner except as specified in AS 1735.12.*
- (d) Handles on sliding doors shall be not less than 60 mm from the door jamb or doorstop when in the open or closed position, as shown in Figure 30.*
- (e) Manual controls to power-operated doors shall be located on the continuous accessible path of travel no closer than 500 mm from an internal corner and between 1000 mm to 2000 mm from the hinged door*

leaf in any position or clear of a surface-mounted sliding door in the open position.

Documentation Provided

For the preparation of this assessment, schematic drawings of the plan and elevations of the M-Pod (File Name: MPOD_LINE_DRAWINGS_b7ec9eae-fdd2-4ff6-8ee8-6dbab2c6fde2) and D-Pod (File Name: DPOD_LINE_DRAWING_ad0953e0-cd16-4060-8c42-c382c2c390f4) have been reviewed. Additionally, the product brochure/catalogue for the office pod series (File Name: INAPOD CATALOGUE) has also been reviewed.

Dimensioned plan and front views of the subject pod products are shown in Figures 1 and 2 below. Images of the products from the catalogue are shown in Figures 3 and 4.

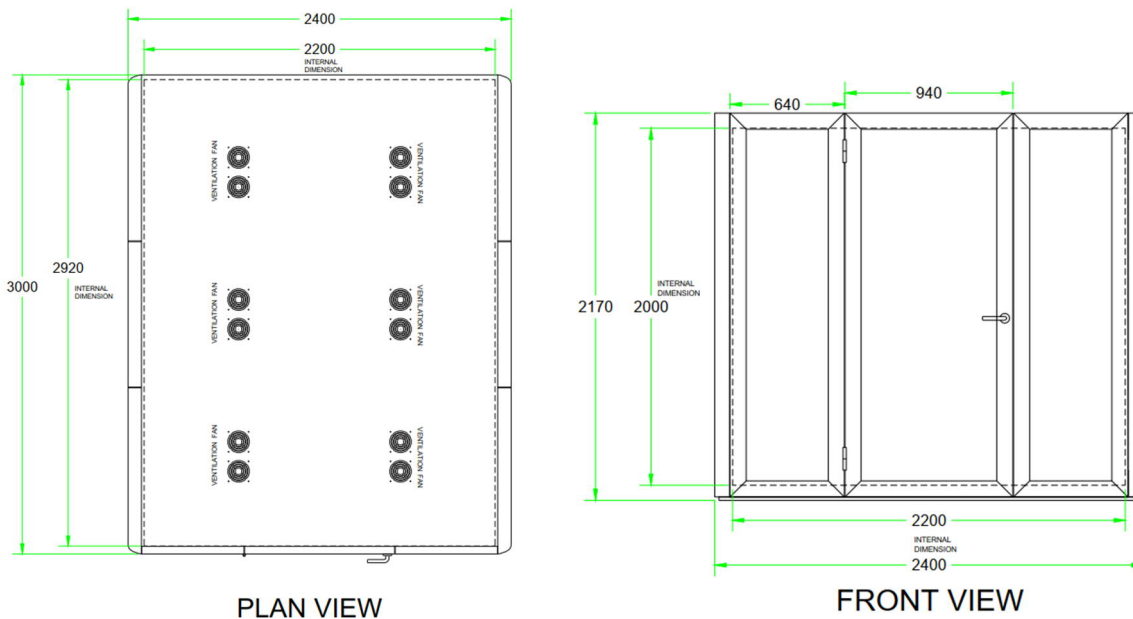


Figure 1: Plan View and Front View of M-Pod

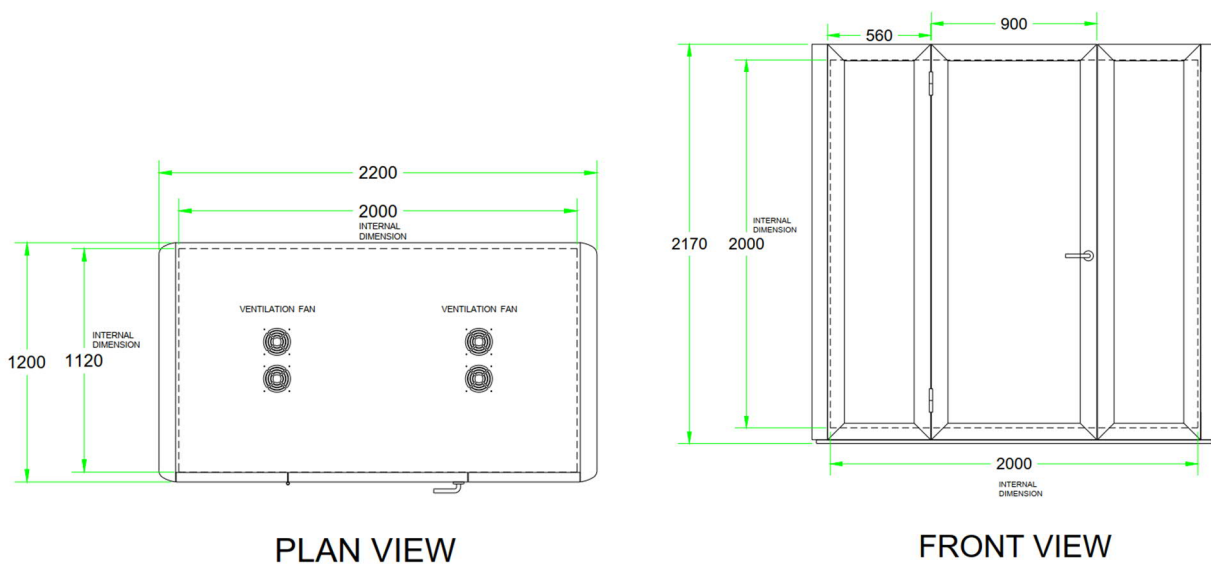


Figure 2: Plan View and Front View of D-Pod

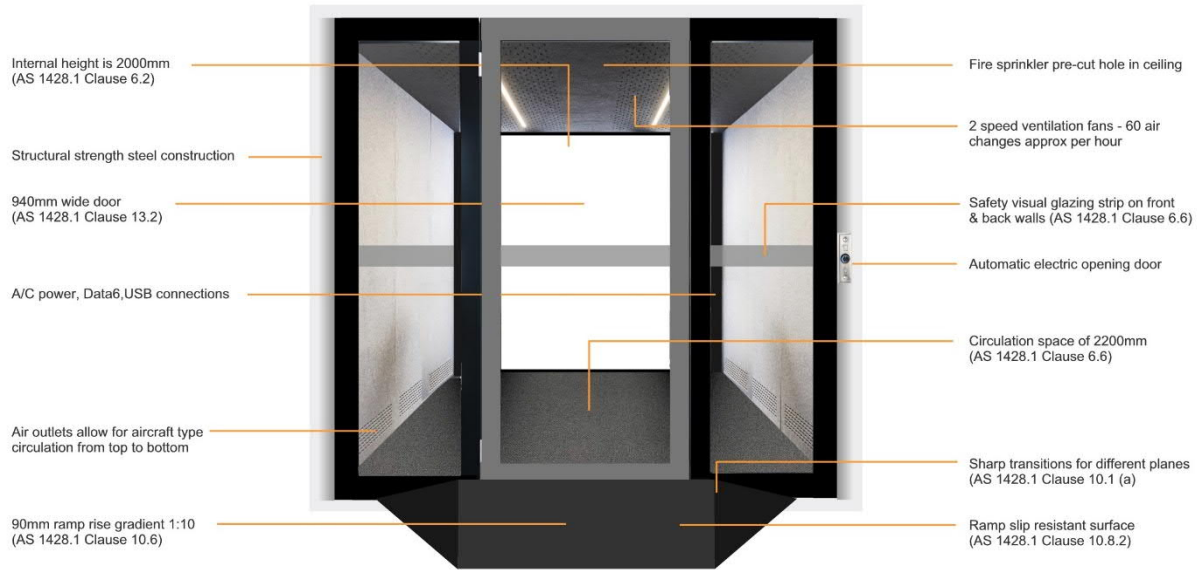


Figure 3: Access Images of M-Pod

M-POD - Turning circle

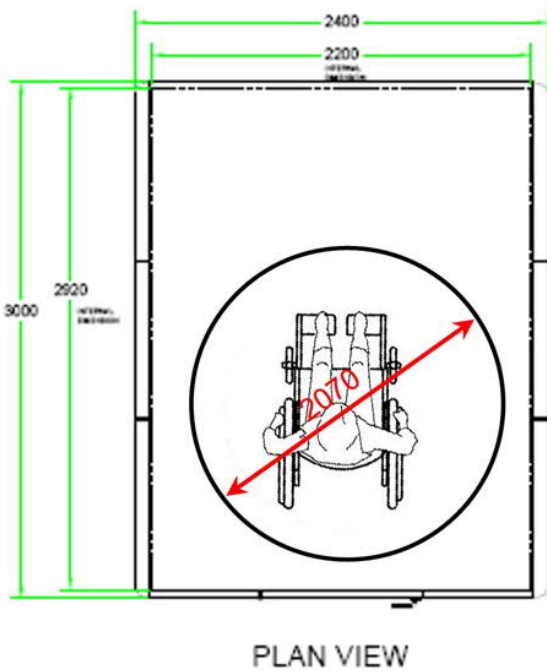


Figure 4: Turning Space M-Pod

Assessment Table

No.	'Deemed-to-Satisfy' Requirements	M-Pod	D-Pod
Paths of Travel			
1.	Paths of travel must not contain any steps. AS 1428.1 Clause 6.1	Ramp and auto door operator added to the design. Whilst this does not comply with the deemed to satisfy requirements, we believe this meets the BCA performance requirements DP1	Not applicable as pod is too small for wheelchair access, however access provisions for people with vision impairment comply.
2.	Paths of travel must be minimum 2000mm high (except that they can be 1980mm through doors) AS 1428.1 Clause 6.2	Complies. Internal height shown as 2000mm which will only just comply (will not comply if any fixtures hang below this).	Not applicable as pod is too small for wheelchair access, however access provisions for people with vision impairment comply.
3.	Paths of travel (except at doors) must be minimum 1000mm wide with no impeding fixtures and fittings or door handles less than 900 mm AFFL. AS 1428.1 Clause 6.3	Complies. Without furniture (including table) only.	Not applicable as pod is too small for wheelchair access, however access provisions for people with vision impairment comply.
4.	A circulation space for a 180° turn of minimum 2070 mm in the direction of travel and 1540 mm wide must be provided where at the end of any accessway. AS 1428.1 Clause 6.5.3	Complies. Without furniture only.	Not applicable as pod is too small for wheelchair access, however access provisions for people with vision impairment comply.
5.	Visual indicators complying with AS 1428.1 Clause 6.6 must be provided on all frameless or fully glazed doors, sidelights, and any other glazing capable of being mistaken for a doorway or opening (wider than 500mm). AS 1428.1 Clause 6.6	Complies.	Complies.
Walkways, Ramps and Landings			
6.	Sharp transitions must be provided between the planes of landings and ramps. AS 1428.1 Clause 10.1(a)	Complies.	Not applicable as pod is too small for wheelchair access, however access

No.	'Deemed-to-Satisfy' Requirements	M-Pod	D-Pod
			provisions for people with vision impairment comply.
7.	<p>Where a step ramp is provided, it must have</p> <ul style="list-style-type: none"> • a maximum rise of 190 mm; • a length not greater than 1900 mm; and • a gradient not steeper than 1 in 10. • edges of step ramp shall have either: <ul style="list-style-type: none"> ○ a 45° splay where there is pedestrian cross traffic ○ a wall or suitable barrier with a minimum height of 450 mm; or ○ where an open balustrade is provided a kerb or kerb rail shall be provided. • Step ramps shall have a slip-resistant surface. <p>AS 1428.1 Clause 10.6</p>	Complies.	Not applicable as pod is too small for wheelchair access, however access provisions for people with vision impairment comply.
8.	<p>Where a step ramp is provided, it must have landings as follows:</p> <ul style="list-style-type: none"> • Min. 1200 mm in the direction of travel. • Where a change in direction is required, minimum landing length of 1500 mm. • Where doorways are at landings, the dimensions of the landings shall be in accordance with the requirements of Clause 13.3 for circulation spaces at doorways. <p>AS 1428.1 Clause 10.8.2</p>	Does not comply to deemed-to-satisfy requirements however a ramp and auto door operator has been added to the design. We believe this will mean the pod will meet the BCA performance requirements DP1.	Not applicable as pod is too small for wheelchair access, however access provisions for people with vision impairment comply.
Doorways			
9.	<p>Doors must achieve a min. of 30% luminance contrast with their surrounds for a min. width of 50mm.</p> <p>AS 1428.1 Clause 13.1</p>	Complies.	Complies.

No.	'Deemed-to-Satisfy' Requirements	M-Pod	D-Pod
10.	Doors must have a min. clear opening of 850mm (generally 920mm swing door or 1020mm sliding door required) AS 1428.1 Clause 13.2	Complies.	Complies.
11.	Doors must be provided with circulation spaces on each side with a max. gradient and crossfall of 1:40. Size of circulation spaces will depend on the direction of approach of users and the way a door swings (as per AS 1428.1 Figures 31 & 32). AS 1428.1 Clause 13.3	Complies. Internal circulation will comply (with relocatable furniture) for a front approach. External circulation will depend on the way the pod is installed.	Pod is too small for wheelchair access.
12.	Doors handles must be of the type that allows the door to be unlocked and opened with one hand. The handle shall be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch. AS 1428.1 Clause 13.5.2(a)	Complies.	Complies.
13.	Doors handles must have a clearance between the handle and the back plate or door face at the centre grip section of the handle of 35 - 45 mm. AS 1428.1 Clause 13.5.2(b)	Complies.	Complies.
14.	Where snibs are installed, they shall have a lever handle of a minimum length of 45 mm from the centre of the spindle. AS 1428.1 Clause 13.5.2(d)	Not applicable as pod is not lockable	Not applicable as pod is not lockable
15.	Where a door closer is fitted, the force required to open or hold open a door must not exceed 20N. AS 1428.1 Clause 13.5.2(e)	Complies. Automated closer fitted	Complies
16.	Door controls that need to be grasped or turned must be installed 900-1100mm AFFL. AS 1428.1 Clause 13.5.3(a)	Complies.	Complies.

From the documentation provided for the M-Pod and the D-Pod, we have concluded:

- M-Pods are fully accessible as they meet the performance requirements DP1 of the Building Code of Australia by using a combination of access ramp and door automation
- D-Pods are accessible for people with vision impairment but, due to their size are not wheelchair accessible.

Conclusion

Following the above assessment, the M-Pod and D-Pod achieve varying levels of compliance with AS 1428.1 as M-Pods are fully accessible for people that use wheelchairs or are vision impaired, whereas D-Pods do not provide access for people in wheelchairs but meet the requirements for vision impairment.

It is my professional opinion; it would not be unreasonable to use a combination of these units at a ratio of one M-Pod for up to ten D-Pods.

Should you require any further clarification or assistance, please do not hesitate to contact the undersigned on 03 9001 5805 or via email on office@equalaccessgroup.com.au.

Yours faithfully,
EQUAL ACCESS

A handwritten signature in blue ink, appearing to read "Bruce Bromley", written in a cursive style.

BRUCE BROMLEY
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