Uniclass L72107	EPIC H123
CI/SfB	
(74.26)	X

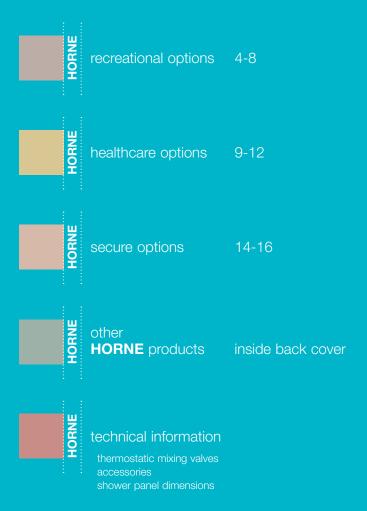
shower panel specification manual 2013

HORNE





safe and comfortable showering



Over this time, our thermostatic technology has been continuously developed and refined and is now incorporated into our extensive range of shower products. Our shower panels have been developed to precisely address the particular requirements of a variety of specific commercial and institutional markets such as healthcare, education and sport and leisure. Within our company, product development is a continuous programme, always addressing the requirements of the user as well as the specifier, installer and maintenance administrator and operative. HORNE Engineering is an ISO 9001:2000 accredited company.







Why **HORNE** shower panels?

SHOWER PANELS PROVIDE A HOST OF BENEFICIAL FEATURES.

SAFETY

featured as integral to the Healthcare and Secure panel options are certified as Type 3 in complianc with the NHS Model engineering specifications D 08 Thermostatic mixing valves (healthcare premises) and BS 7942

DURABILITY

MAINTENANCE

The shower panels are surface mounted, which means that all of the essential components that will require maintenance are easily accessed. In some models, the service valves have been moved to a lower position to allow for maintenance to be carried out from the safety of floor level. Fast and simple maintenance procedures will help ensure the correct operation of the shower over a maximised lifespan thus supporting the following BREEAM MAN-05 criteria: Operation and Ease of maintenance and HEA-04 criteria: minimising the risk of contamination. Further guidance on installation & maintenance procedures are given in the Maintenance & Support area of the Horne website at www.horne.co.uk.

COST

and fast. Calculating the costs and time required to install the shower is very straightforward. The assembly and fitting work is done efficiently on the production line of our factory, including the pressure and performance testing of every panel, making the installed shower a very economical option.

SPECIFICATION

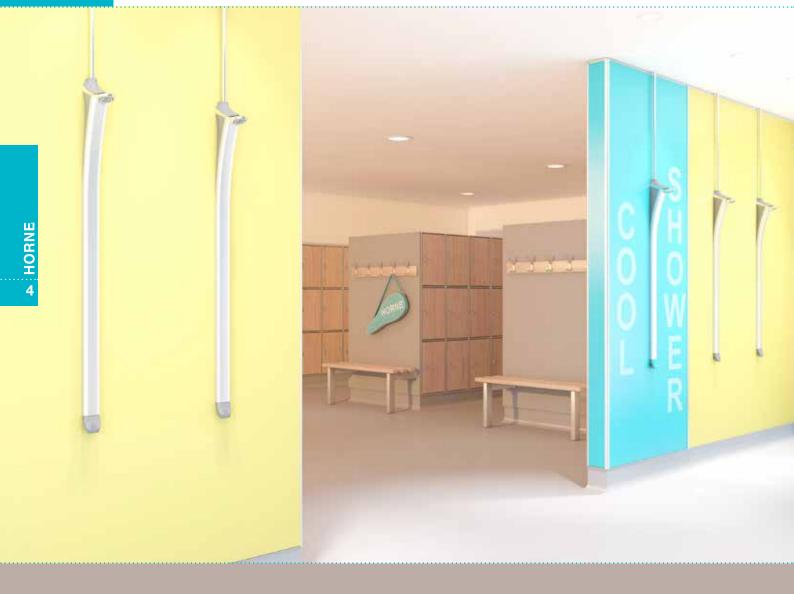
ECONOMY

SUSTAINABILITY

For further detailed information on the shower panel range please view the comprehensive animated tour at www.horne.co.uk/Products/Shower-panels







For a virtual tour of the shower panel range please visit www.horne.co.uk/Products/Shower-panels

recreational options



GYMS, SPORTS HALLS

A number of options have been designed specifically for the sport and leisure market.

Group showers, such as the Horne Duŝo can be supplied with pre-blended warm water from a suitably sized HORNE TMV.

For assistance with sizing a valve for group mixing shower installations please visit our VALVE SELECTOR tool at www.horne.co.uk

Our recreational shower panels feature a timed flow control paired with a variety of shower head options. A number of showers also feature integral thermostatic controls that allow for either pre-set or user temperature adjustment.

All options feature an integral flow regulator, designed to control the flow rate at the shower head to 6 or 8 litres per minute. This feature, combined with the timed flow control, saves water and energy, thus contributing to BREEAM credits. As such, selected Horne shower panels are included on the Water Technology List and are eligible for tax relief under the Enhanced Capital Allowances Scheme.



team players

Integrated shower assembly featuring hydraulically actuated timed-flow control, hard anodised aluminium column, chromium plated shower head, adjustable spray plate and flow regulation (8 L/min). Actuator paddle and spray plate in a choice of colours manufactured in robust and durable injection moulded polymers. Generally as per HORNE customer drawing D10397.

For use with pre-blended water supply only and to be installed and commissioned according to the manufacturer's instructions.

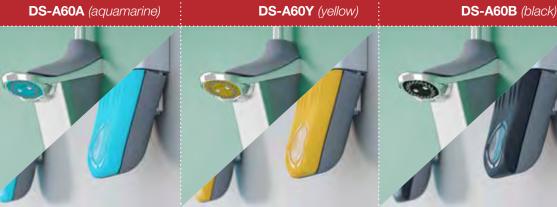


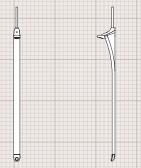
Duŝo / duso / n.

Features

- Sleek and elegant design
- Robust design for maximised lifespan
- Fixed, vandal resistant shower head with integral flow regulator (8 L/min)
- Hydraulically actuated push paddle timed flow control
- Timed flow control cartridge protected by in-line fine mesh strainer
- 60+ seconds flow duration (with option to reduce to 30 seconds, if desired)

- Bi-directional spray plate
- Easy clean silicon rubber spray nozzle array
- Fully accessible for routine maintenance and cleaning
- Full assembly performance and leak tested in production
- Made from recyclable materials
- Actuator paddle and spray plate colour options:





A narrated animation provides an explicit and comprehensive product tour of the Duŝo

www.horne.co.uk/Products/Shower-Panels/Recreational



N.B. Minimum operating pressure 1 bar dynamic at the shower head

Panel - anodised aluminium extrusion with moulded parts in Acetal and polypropylene

Max weight - 2.25 Kg

HORNE SHOWER PANEL WITH TIMED FLOW CONTROL AND VANDAL RESISTANT SHOWER HEAD.

A white polyester powder coated aluminium panel including push button timed flow control and vandal resistant shower head in chromium plated finish with easy-clean spray nozzles.

Note: For use with mixed water supply only

HORNE SHOWER PANEL WITH TIMED FLOW **CONTROL, SLIDE BAR, FLEXIBLE HOSE AND 3 FUNCTION SHOWER HANDSET.**

A white polyester powder coated aluminium panel with push button timed flow control and shower kit comprising chromium plated 3 function easy clean shower hand set with flexible hose and slide bar.

Note: For use with mixed water supply only





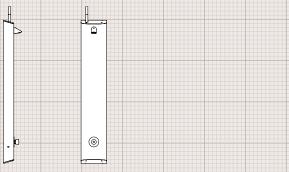
10356 SHOWER HEAD SLIDE BAR SOLID BRASS OUTLET RELEASE DETAIL SHOWER HEAD SPRAY PATTERN FLOW REGULATOR Between panel side outlet and hose - 8 L/min

THERMOSTATIC MIXING VALVE

Requires mixed water supplied from HORNE group mixing valve

ISOLATING VALVES To be fitted onto mi

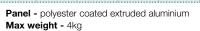
WATER INLET OPTIONS



N.B. Minimum operating pressure 0.5 bar dynamic at the shower head

Panel - polyester coated extruded aluminium, Hose - PVC Max weight - 8.5kg

N.B. Minimum operating pressure 0.5 bar dynamic at the shower head





team players

HORNE TSV1 SHOWER PANEL WITH TEMPERATURE CONTROL, TIMED FLOW CONTROL AND VANDAL RESISTANT SHOWER HEAD.

Includes integral thermostatic shower valve pre-plumbed within a white polyester powder coated aluminium panel with temperature control, push button timed flow control and vandal resistant shower head in chromium plated finish with easy-clean spray nozzles. Includes easy access, low-level servicing valves on hot and cold supplies.

HORNE TSV1 SHOWER PANEL WITH TEMPERATURE CONTROL, TIMED FLOW CONTROL AND SWIVEL SHOWER HEAD.

Includes integral thermostatic shower valve pre-plumbed within a white polyester powder coated aluminium panel with temperature control, push button timed flow control and easy clean swivel shower head in chromium plated finish. Includes easy access, lowlevel servicing valves on hot and cold supplies.



Panel - polyester coated extruded aluminium Max weight - 7kg

(3)

Panel - polyester coated extruded aluminium Max weight - 7kg

0

0

N.B. Minimum operating pressure 0.5 bar dynamic at the shower head

N.B. Minimum operating pressure 0.5 bar dynamic at the shower head

HORNE SHOWER PANEL WITH TIMED FLOW CONTROL AND VANDAL RESISTANT SHOWER HEAD

Includes integral HORNE 15 thermostatic mixing valve preplumbed within a white polyester powder coated aluminium panel with push button timed flow control and vandal resistant shower head in chromium plated finish with easy-clean spray nozzles. Includes easy access, low-level servicing valves on hot and cold supplies.

HORNE TSV1 SHOWER PANEL WITH TIMED FLOW CONTROL SLIDE BAR, FLEXIBLE HOSE AND THREE FUNCTION HANDSET.

Includes integral HORNE 15 thermostatic mixing valve pre-plumbed within a white polyester powder coated aluminium with push button timed flow control and shower kit comprising chromium plated 3 function easy clean shower hand set with flexible hose and slide bar. Includes easy access, low-level servicing valves on hot and cold supplies.

TSV1-A109A 10351 SHOWER HEAD USER CONTROL SHOWER HEAD SPRAY PATTERN FLOW REGULATOR THERMOSTATIC MIXING VALVE SERVICING VALVES WATER INLET OPTIONS

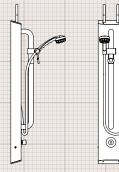




THERMOSTATIC MIXING VALVE

SERVICING VALVES

WATER INLET OPTIONS



N.B. Minimum operating pressure 0.5 bar dynamic at the shower head

N.B. Minimum operating pressure 0.5 bar dynamic at the shower head

Panel - polyester coated extruded aluminium

Max weight - 7kg

Panel - polyester coated extruded aluminium

Max weight - 8.5kg

0



For a virtual tour of the shower panel range please visit www.horne.co.uk/Products/Shower-panels



healthcare options

HOSPITALS

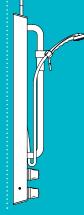
Each of our TSV1 shower panels that have been developed for the healthcare market features a dual control HORNE TSV1 Thermostatic Shower Valve. This valve has been independently tested and verified as being compliant with the performance requirements of the NHS Model engineering specifications D 08 Thermostatic mixing valves (Healthcare premises) for both high and low pressure showering designations.

The slide bar option features a most robust construction. Manufactured from nylon with a steel core, it is securely fixed to the casing by means of two M12 stainless steel bolts.

The slide mechanism is very easy to use and see (in accordance with BS8300) while the flow and temperature controls rotate with minimal torque. BS8300 compliant levers can also be specified – please suffix the catalogue code with 2L, e.g. TSV1-A106A2L.

The dual outlet panel option offers increased usability while catering for the needs of a wider population.

During installation, the maximum mixed water temperature can be set to ensure that the user cannot accidentally turn the setting to a dangerously high level. Low level isolating servicing valves on the sides of the panel allow maintenance to be carried out from the safety of floor level.





The Horne TSV1-3 Thermostatic Shower Valve is a TMV3 Scheme approved product.

form & function

HORNE TSV1 SHOWER PANEL WITH DUAL CONTROL THERMOSTATIC SHOWER VALVE AND VANDAL RESISTANT SHOWER HEAD.

Includes integral HORNE TSV1 thermostatic shower valve preplumbed within a white polyester powder coated aluminium panel with dual hand controls and vandal resistant shower head in chromium plated finish with easy-clean spray nozzles. Includes easy access, low-level isolating servicing valves on hot and cold supplies.

HORNE TSV1 SHOWER PANEL WITH DUAL CONTROL THERMOSTATIC SHOWER VALVE AND SWIVEL SHOWER HEAD.

Includes integral HORNE TSV1 thermostatic shower valve pre-plumbed within a white polyester powder coated aluminium panel with dual hand controls and easy clean shower head in chromium plated finish. Includes easy access, low-level isolating servicing valves on hot and cold supplies.



Panel - polyester coated extruded aluminium Max weight - 7kg

Panel - polyester coated extruded aluminium Max weight - 7kg

. D

0

N.B. Minimum operating pressure 0.2 bar dynamic at the shower head

(

N.B. Minimum operating pressure 0.2 bar dynamic at the shower head

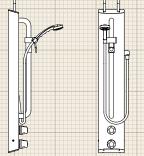
HORNE TSV1 SHOWER PANEL WITH FLEXIBLE HOSE AND SLIDE BAR AND SINGLE FUNCTION SHOWER HEAD.

Includes integral HORNE TSV1 thermostatic shower valve pre-plumbed within a white polyester powder coated aluminium panel with dual hand controls and shower kit, comprising chromium plated single function shower hand set with flexible hose and slide bar. Includes easy access, low-level isolating servicing valves on hot and cold supplies.

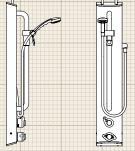
HORNE TSV1 SHOWER PANEL WITH FLEXIBLE HOSE AND SLIDE BAR AND SINGLE FUNCTION SHOWER HEAD.

Includes integral HORNE TSV1 thermostatic shower valve pre-plumbed within a white polyester powder coated aluminium panel with dual lever hand controls and shower kit, comprising chromium plated single function shower hand set with flexible hose and slide bar. Includes easy access, low-level isolating servicing valves on hot and cold supplies.





N.B. Minimum operating pressure 0.2 bar dynamic at the shower head



N.B. Minimum operating pressure 1 bar dynamic at the shower head

Panel - polyester coated extruded aluminium, Hose - PVC
Max weight - 8.5kg

Panel - polyester coated extruded aluminium, Hose - PVC
Max weight - 8.5kg

12

HORNE DUAL MODE SHOWER PANEL WITH AUTO DIVERT AND BS8300 COMPLIANT LEVER CONTROLS

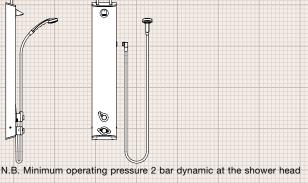
Includes BS 8300 compliant levers on flow and temperature controls with fixed vandal resistant shower head in chromium plated finish with easy-clean spray nozzles and detachable 2m hose with single function handset. Includes easy access, low-level isolating servicing valves on hot and cold supplies.

UNSUPERVISED MODE: Shower lever controls and fixed vandal resistant shower head.

ASSISTED MODE: Shower lever controls and detachable 2m hose with single function handset. Water flow automatically diverts to the handset when the hose is connected to the panel.



The minimum recommended is 2 bar.



2 Dynamic Inlet Pressures (Bar) The shower handset will give a flow rate of 4 L/min ± 20% depending on the available pressure at the shower head as shown in the graph above.

Panel - Polyester coated extruded aluminium, Hose - PVC Max weight - 7kg



For a virtual tour of the shower panel range please visit **www.horne.co.uk/Products/Shower-panels**



secure options

INSTITUTIONS

Where security is a requirement, we offer panels that address the risks of vandalism or self harm by the user. In addition to the fixed, vandal and ligature resistant shower head, a ligature resistant security bezel is fitted around the timed flow control. The dual mode shower panel has ligature resistant features and offers increased usability while catering for the needs of a wider population. A pipe cover is a further option where it is considered desirable to conceal any exposed supply pipework above the panel (see accessories page).

Alternatively, the shower panels can be supplied with flexible braided hoses with SOFT-PEX liner on the supply pipes and connection can be made through to a void behind the wall, which is concealed by the shower panel itself. To specify the braided hose option please add the letter 'B' after the product code i.e. TSV1-A109AB.



14

HORNE DUAL MODE LIGATURE RESISTANT SHOWER PANEL WITH AUTO DIVERT

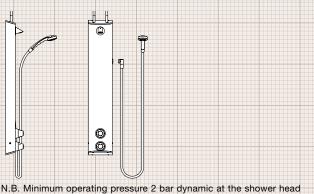
Includes integral HORNE TSV1 thermostatic shower valve pre-plumbed within a white polyester powder coated aluminium panel. Includes ligature resistant dual hand controls with ligature and vandal resistant shower head in chromium plated finish with easy-clean spray nozzles and detachable 2m hose with single function handset. Includes easy access, low-level isolating servicing valves on hot and cold supplies.

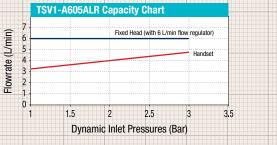
UNSUPERVISED MODE: Shower controls and fixed outlet fitting with ligature and vandal resistant features.

ASSISTED MODE: Ligature resistant shower controls and detachable 2m hose with single function handset. Hose and handset to be accessible to and by authorised personnel only. Water flow automatically diverts to the handset when the hose is connected to the panel.









The shower handset will give a flow rate of 4 L/min \pm 20% depending on the available pressure at the shower head as shown in the graph above.

The minimum recommended is 2 bar.

Panel - polyester coated extruded aluminium. **Hose** - PVC **Max weight -** 7kg

HORNE TSV1 LIGATURE RESISTANT SHOWER PANEL WITH DUAL CONTROL THERMOSTATIC SHOWER VALVE AND VANDAL RESISTANT SHOWER HEAD

Includes integral HORNE TSV1-3 thermostatic shower valve preplumbed within a white polyester powder coated aluminium panel with ligature resistant dual controls and ligature and vandal resistant shower head in chromium plated finish with easy clean spray nozzles. Includes easy access, low level servicing valves on hot and cold supplies.

HORNE TSV1 LIGATURE RESISTANT SHOWER PANEL WITH TEMPERATURE CONTROL, TIMED FLOW CONTROL AND VANDAL RESISTANT SHOWER HEAD

Includes integral thermostatic shower valve pre-plumbed within a white polyester powder coated aluminium panel with ligature resistant temperature control, push button timed flow control and ligature and vandal resistant shower head in chromium plated finish with easy clean spray nozzles. Includes easy access, low level servicing valves on hot and cold supplies.

STOMER DRAWING NO TSV1-A105ALR TSV1-A113ALR 10389 D11301 SHOWER HEAD SHOWER HEAD USER USER CONTROLS CONTROLS SHOWER HEAD SHOWER HEAD SPRAY PATTERN SPRAY PATTERN FLOW REGULATOR FLOW REGULATOR head - 6 L/min THERMOSTATIC MIXING VALVE THERMOSTATIC MIXING VALVE TYPE 3 HORNE TSV1 - Dual contro SERVICING VALVES SERVICING VALVES s of panel WATER INLET OPTIONS WATER INLET OPTIONS 15mm pipe through top of panel or braided hose*

Panel - polyester coated extruded aluminium

Max weight - 7kg

0

Panel - polyester coated extruded aluminium **Max weight -** 7kg

(6)

N.B. Minimum operating pressure 1 bar dynamic at the shower head

N.B. Minimum operating pressure 1 bar dynamic at the shower head

HORNE SHOWER PANEL WITH LIGATURE RESISTANT TIMED FLOW CONTROL AND VANDAL RESISTANT SHOWER HEAD

Includes integral HORNE 15 thermostatic mixing valve pre-plumbed within a white polyester coated aluminium panel including ligature resistant push button timed flow control and vandal resistant shower head in chromium plated finish with easy-clean spray nozzles.

HORNE SHOWER PANEL WITH LIGATURE RESISTANT TIMED FLOW CONTROL AND VANDAL RESISTANT SHOWER HEAD

Includes integral HORNE 15 thermostatic mixing valve pre-plumbed within a white polyester coated aluminium panel including ligature resistant push button timed flow control and vandal resistant shower head in chromium plated finish with easy-clean spray nozzles. Water inlets by braided hose through back of panel.



Panel - polyester coated extruded aluminium

N.B. Minimum operating pressure 0.5 bar dynamic at the shower head

Max weight - 7kg

Panel - polyester coated extruded aluminium

N.B. Minimum operating pressure 0.5 bar dynamic at the shower head

Max weight - 7kg

HORNE

Other products available from **HORNE**



Thermostatic Mixing Valves (TMVs)

HORNE developed and manufactured the first blending valves in the early 1920s. We now supply a range of TMVs for a variety of applications including healthcare, nursing and sheltered accommodation, education, sport and leisure, housing associations, secure hospitals and prisons.

The current range of HORNE TMVs (DN15-DN50) is a result of over eighty years of development and improvement. Materials and designs have been adapted to ensure that the product is highly robust, durable and easily maintained for a maximised lifespan.





The optimum in safety and control

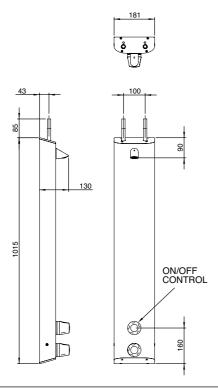
The award-winning OPTITHERM®* is a highly specialised thermostatic tap developed principally for healthcare applications. We set out to achieve a design that meets the needs of a variety of users looking for the following key features:

- ease of use
- consistent delivery of safe and comfortable hot water
- easy access for testing and maintenance of integral thermostatic valve and water supply
- optimised user interface to enhance hand hygiene compliance
- easy cleaning for improved hygiene
- ompliance with a range of healthcare related regulations and published guidance
- robust construction
- efficient use of energy and water
 - minimisation of coldwater dead legs

 For an animated tour of the optitherm thermostatic tap
 please visit www.horne.co.uk/Products/Optitherm

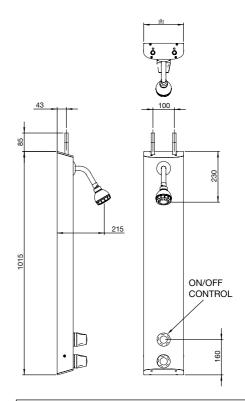






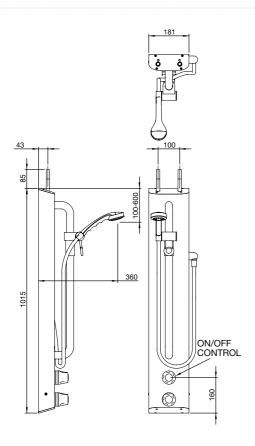
THESE DIMENSIONS REFER TO:

TSV1-A1A5A TSV1-A113A SP-A110A TSV1-A605ALR TSV1-A109A and variants of TSV1-A60502L TSV1-A109ALR



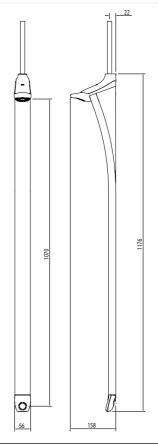
THESE DIMENSIONS REFER TO:

TSV1-A106A TSV1-A206A TSV1-A306A and variants of



THESE DIMENSIONS REFER TO:

TSV1-A107A TSV1-A307A and variants of TSV1-A108A SP-A407A



THESE DIMENSIONS REFER TO:		
DS-A60A DS-A60Y	DS-A60G DS-A60B	

TECHNICAL INFORMATION

TMV SPECIFICATIONS

HORNE Shower Panels mostly feature an integral thermostatic mixing valve, which is either the HORNE TSV1 Dual Control Shower Valve, a combined shower valve with timed flow control or the HORNE 15 Thermostatic Mixing Valve (no user adjustment of temperature). Panels that are designed for group showering should be connected to a pre-mixed water supply from a suitably sized HORNE group mixing valve. (See Fig 1).

For assistance with sizing group mixing valves for a specific installation please visit the VALVE SELECTOR TOOL at www.horne.co.uk

HORNE THERMOSTATIC MIXING VALVE FEATURES

PIPE CONNECTIONS BY COMPRESSION OR PUSH FIT FITTINGS

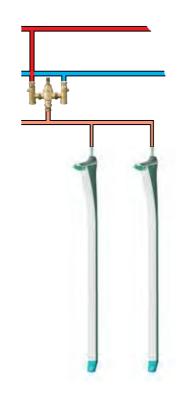
INTEGRAL FINE MESH STRAINERS, WHICH PROVIDE ESSENTIAL PROTECTION TO THE INTERNAL MECHANISM OF THE VALVE AND ANCILLARY FITTINGS

ANGLE PATTERN INLETS, WHICH ENABLE EASY ACCESS TO STRAINERS

INTEGRAL CHECK VALVES, WHICH PREVENT CROSS MIGRATION OF WATER SUPPLIES

FLUSHING FACILITY TO ALLOW WATER SUPPLIES TO BE FLUSHED CLEAN DURING COMMISSIONING.

ALL HORNE TMVs ARE WRAS APPROVED



HORNE Duŝo PANELS supplied with mixed water from Horne 20 group thermostatic mixing valve

Fig 1

ACCESSORIES - Pipe cover

A pipe cover, with the same profile as the aluminium panel, can be used to conceal the pipework between the top of the shower panel and the ceiling. N.B. the pipe cover is not suitable for use with the Duŝo

Part No. SA-465PC - maximum length 465mm Part No. SA-940PC - maximum length 940mm

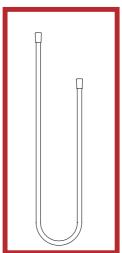


CUSTOMER DRAWING NO

MATERIAL

Polyester coated extruded aluminium

ACCESSORIES - Extra long hose



The shower panels that feature a hose and hand set option can be supplied with a 2m long, anti-kink and easy clean hose (standard length is 1.25m) made in PVC. To specify, ask for Part No. 43-5826 and the longer hose will be supplied fitted to the specified shower panel.



HORNE ENGINEERING Ltd
PO Box 7, Rankine Street
Johnstone, United Kingdom PA5 8BD
tel +44 (0)1505 321455
fax +44 (0)1505 336287
email sales@horne.co.uk
web www.horne.co.uk

Copyright Horne Engineering Ltd