jonite





PRODUCT CATALOGUE

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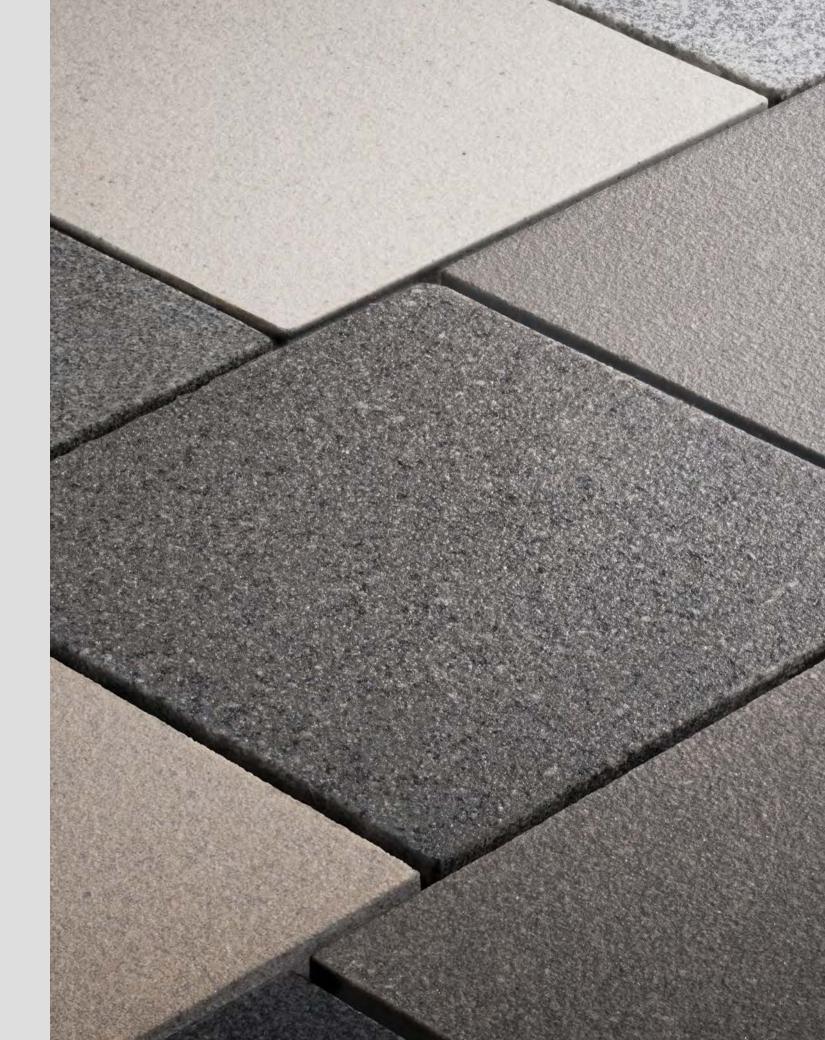
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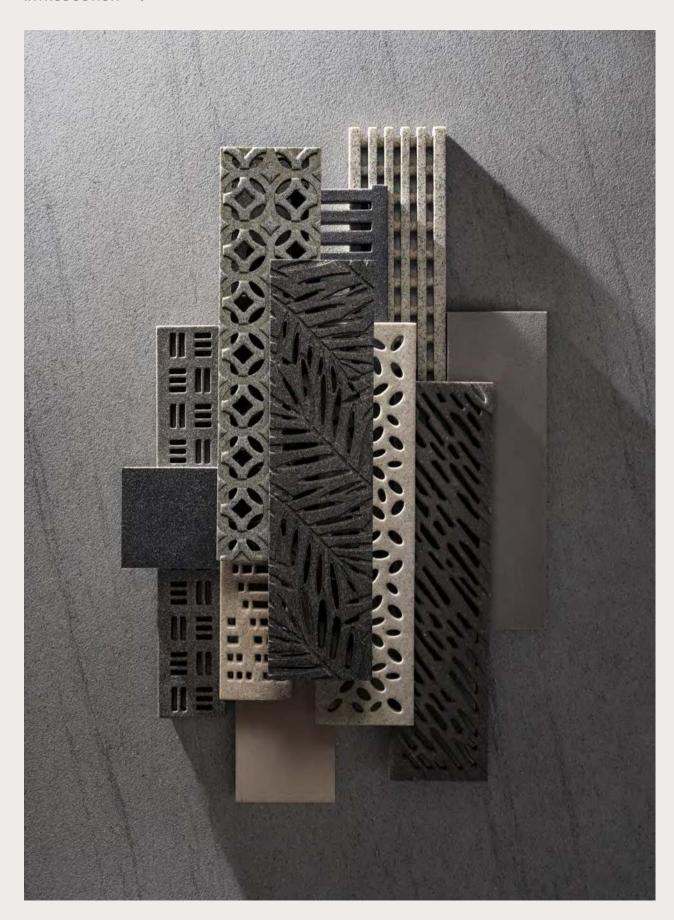
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Our Story

The spark behind our company and innovative products, historical innovation, and how Jonite's journey has resulted in being a partner of choice for hardscape solutions.

Inspired by the beautiful and magnificent stone castles built during the Middle Ages, we wondered if we could incorporate the rustic appeal of natural stone into durable, functional grates.

Thus began our journey to creating the world's first reinforced stone grate. After seven years of extensive research and development, we have coupled with intensive industry feedback, culminated in our first commercially-viable reinforced stone gratings launched to the world in 1994. In the years since then, we have continued to partner with architects, developers, and other distinguished customers in hardscape design.

We are striving to create even more durable, more aesthetically appealing, and environmentally friendly reinforced stone grates and panels. Thousands of clients have specified Jonite, chosen for the ultimate marriage of aesthetics and load-bearing performance.

Our Vision

Your reinforced decorative stone partner, presenting possibilities helping you solve architectural problems with innovative hardscape solutions.

We are your partner in presenting possibilities in helping you solve architectural problems with innovative reinforced stone solutions.

We are your stone hardscape partner that recognizes the transformational potential of a space. Our eye for detail, engaging designs, and dedication to lasting value aid architects to realise their vision. Every day, innovative development efforts are invested following constant feedback to ensure the best possible architectural products are created, with environmental concerns in mind, beauty, naturalness, and strength.

Our vision is to be a preferred brand that inspires architects to create bold and beautiful designs using our stone solutions.

Why Jonite?



Stone Aesthetics

Created from 95% natural aggregates and advanced hybrid polymers, Jonite architectural grates provide a finish which is both luxurious and natural to the touch, enabling architects to create unified designs from grates to street furniture and more.



Slip Resistance

Rough and natural matte surface enables natural slip resistance held up to international classifications. This provides a much-needed and unparalleled safety feature for schools and hospitals.



Sustainability

All Jonite products comprise at least 30% recycled materials, and our R&D team is constantly working to make our products and manufacturing processes even more sustainable. We are also held up to several sustainability standards in Singapore and the US.



Durability

The unique material properties of Jonite products which prevents rust and corrosion mean they are equally suited to last a lifetime for both indoor and outdoor applications.



Theft Resistant

Conventional steel and cast iron grates and castings are highly susceptible to theft due to rising scrap value worldwide. Jonite hardscape products however, do not pose any value for scrap due to their stone material integrity.



High Performance Properties

Reinforced with specially treated steel frames, Jonite grates provide stunning load bearing performance and are compliant to international load standards. Jonite stone products have high flexural, compressive and impact strength, low water and heat absorption.

Jonite, Your Green Partner

Jonite's commitment to the environment is driven from within its core values of the company's vision and mission. Our primary aim is to ensure longevity and quality of our products through energy-saving and resource-conserving production.

Our green practices are recognized - Green Label certified under Singapore Environment Council. The Building and Construction Authority (BCA) of Singapore Green Mark recognizes the use of Green Label certified products, and awards Green Mark points for their usage.

Jonite is also the only grates manufacturer to be recognized as a Leader with 4 ticks under the SGBC (Singapore Green Building Council) Architectural Drain Covers category. Products are assessed on their environmental properties and performance through a comprehensive list of assessment criteria covering the five key areas of Energy Efficiency, Water Efficiency, Resource Efficiency, Health & Environmental Protection and Other Green Features. This enables architects to accrue more BCA Green Mark points if they choose to use our reinforced stone trench grates.

Through the LEED® (Leadership in Energy and Environmental Design) green building certification programme, the U.S. Green Building Council is transforming the built environment. As a member of the USGBC and with the usage of recycled content, Jonite satisfies MR Credit 4: Recycled Content under LEED®. The LEED® Green Building Rating System is the nationally accepted benchmark for the design, construction and operation of high performance green building in the United States.









Custom Design Solutions

Jonite's Design Department comprises of a team of creative designers and experienced engineers working in close collaboration with our Research and Development team. With our integrated operations, we bring you a one-stop support service that assists architects all the way from design concept to the final physical product.

- Custom applications
- Tailored load requirements
- Unique patterns and aesthetics
- Colours that match your project
- A plethora of size options



The Customisation Process

Collaboration

The design team will have an in-depth discussion with you about your goals and vision as to how Jonite panels can fit into your overall design plans. During this time, we will also ensure that there is both material feasibility and cost efficiency before moving forward.

Conceptualisation

Upon receiving details in terms of the design or application effect you'd like to achieve, the design team will work to conceptualise the ideas. Depending on the time you have set aside for customisation, the team may suggest modifications on our current existing line of products, or create a brand new design.

O3 Design & Testing

Our designers will create designs and run stress tests if necessary. During this stage, renderings will be made so that you would be able to visualise the concept fully. Upon receiving your feedback, adjustments can be made to make sure that our designs perfectly encapsulate your vision.

04 Approval

Once all of the requirements are satisfied, we will seek final sign off before commencing production. At this point in time, we can fully support with any shop drawings required to make sure that all details are captured for the successful completion of your project.

05 Production

Upon securing the necessary approvals, we will commence with production. Here at Jonite, we practice Just-In-Time production for all of our products, and are fully capable of making sure we can deliver within the lead time specified. Our experienced sales consultants can help assist to make sure that delivery is ontime for the project.

02

CUSTOMISATIONS \rightarrow



Customisable Areas

Our design team is dedicated to working hand-in-hand with architects and designers to overcome the constraints of different materials so as to achieve the designs of your visions.



Applications

We have helped architects create street furniture, ventilation grilles that also serve as a walking platform, decorative shopfront wall panels and more.



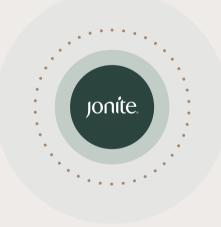
Load Specifications

Our design team can help suggest ways to reinforce our already-strong grates during the manufacturing process.



Open Area

You can customise the open areas for our reinforced stone grates so as to fit the design demands for gratings like ventilation grilles.





Colours & Textures

Our unique composite stone material enables you to choose any hue or texture to perfectly express your creativity.



Patterns

Be it sleek elegance, or playful modernity, you can achieve the perfect look by choosing to customise the patterns of any of our products.



Sizes

Have a unique design vision which calls for curved drainage covers or odd shapes or sizes? You can customise any Jonite design to specific dimensions to cut down on construction inefficiencies.

CUSTOMISATIONS \rightarrow

Colours & Textures

On top of functional features, our team puts special efforts to create the products that work along with your design naturally and aesthetically. We offer a vast range of customised colours for our products, in addition to beautifully curated 16 standard colours by us.

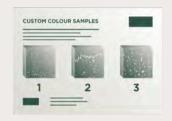
Customised Colours

Step 1



Your sample, a reference for us to match, is couriered to Jonite's colour matching facility. Assessed by our specialists, material and colour combinations are calculated so to achieve the closest possible match. A process that can be achieved within two weeks.

Step 2



Upon completion of the colour matching process, our facility will supply you with three physical samples, different shades of the reference samples for your approval. You will have tangible colour & texture samples of the final product prior to production.

Step 3



Once the desired shade is selected, production will commence on your products and the unique formula saved for future reference. Through our patented technologies, our products can achieve up to a 90% match (to your reference sample).

Standard Colours

*Please note that the samples inherit their core colours from their natural sources, colour may vary slightly from the images shown.

IVORY WHITE

WACKY WHITE



ROSY BEIGE



CHAMPAGNE YELLOW

DESERT BEIGE



TERRACOTTA RED



TEAK BROWN



MOCCA BROWN



GRANITE GREY



ASH GREY



STEEL GREY



SLATE GREY



BAMBOO GREEN



SMOKY GREEN



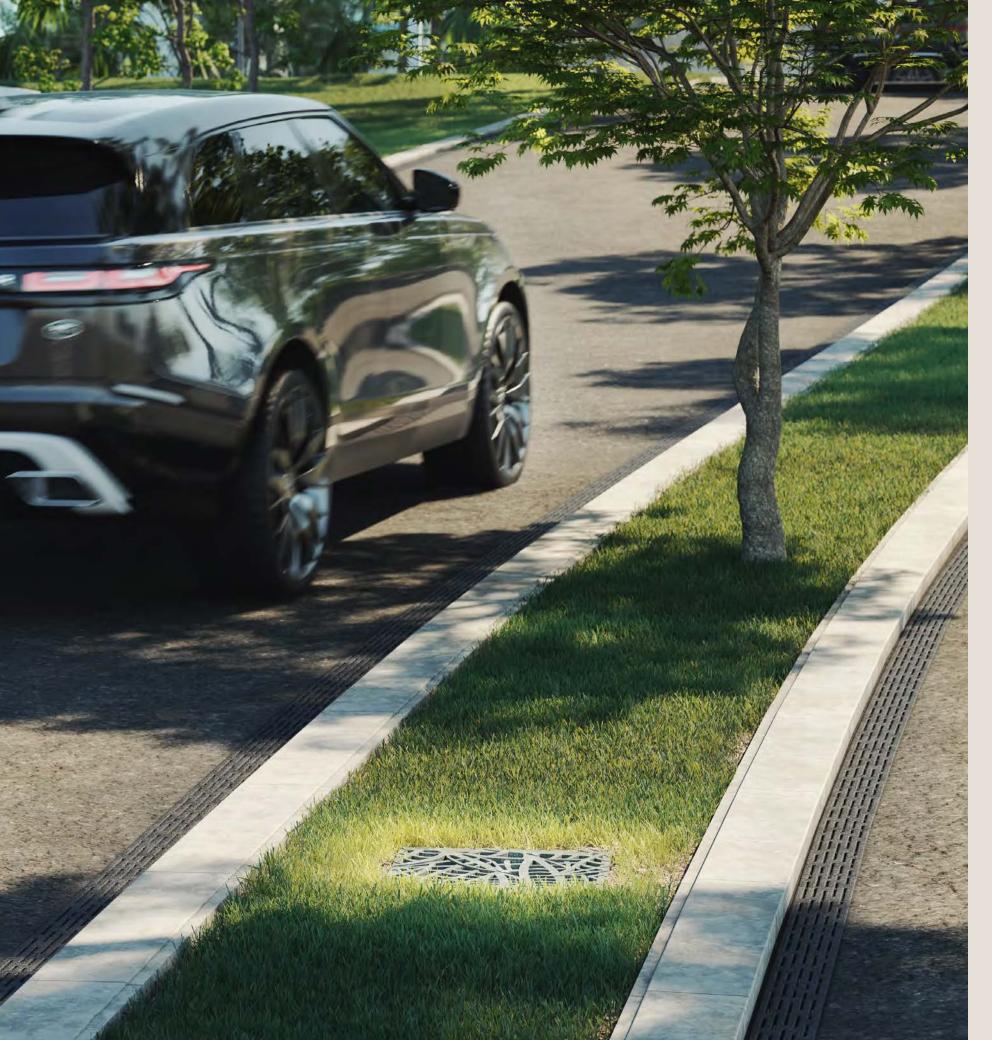
CHARCOAL BLACK



EBONY BLACK







03 PRODUCTS

->

TRENCH GRATES

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PRODUCTS \rightarrow

Trench Grates

Optional Features and Accessories

Jonite reinforced stone trench grates add a gloss of natural, yet modern finish that complements any city hardscape. The humble drain can now be elevated to match any design style.





Heel-Guard™ Grates

Heel-Guard™ Grates have slim 6mm slots and small radius fillets to prevent high heels from being caught in the grates. Compliant with Americans with Disabilities Act (ADA) requirements, these are extremely useful for cut-off or scupper drains of the entrance or concourse areas of a building.

Grate Tiles™

Grate Tiles™ are standard non-perforated solid slabs that have the same material composition and colour as Jonite grates. They are mainly used when a drain encounters an irregular joint or to fill an odd end of a drain.



L-Trimmers™

L-Trimmers™ is recommended for gratings built for heavy-duty applications and above. They are designed to provide aesthetic flair as well as the ideal support for all Jonite grates.



Custom Curve Grates

Curve grates are available in any radius and design upon request. All radius in a plan will be consolidated in a full-scale CAD drawing to help minimize the number of custom toolings required.

GENERAL SPECIFICATIONS

A fundamental hardscape design element of any modern city is the drainage system, which protects against flooding by draining excess water away.

Now, underground drainage systems are designed to cope with frequent storms where any excess water always travels along the planned drainage flow paths to prevent flooding. Drainage systems are carefully planned to factor in the impact the drainage system has on our natural rivers and creeks. We are preventing waste from being washed into rivers and seas.

At Jonite, our reinforced stone channel grates and trench grates have redefined the role of gratings and drain covers in the architecture industry. With Jonite channel gratings and trench gratings, outdoor drain covers are more than functional products – they become a cornerstone in your design. They can become design focal points, inviting the viewer's eye to follow intricate patterns that open up into the building design.

All products in Jonite trench grates collection are available in exquisite textures and colours. All its trench grates give you the finish of natural stone with the strength to sustain pedestrian and vehicular load performance and durability for a lifetime.

Jonite absorbs much less heat compared to traditional ferrous gratings, making it a more comfortable material to have around the house and in children's playgrounds. Also, it has dielectric properties equivalent to porcelain, making it an excellent electrical insulator- a significant plus point in times of tropical thunderstorms.

Landscape architects like yourself have used our channel and trench grates for a variety of purposes, such as outdoor drain covers, channel grating along driveways, storm drainage and indoor applications. Aesthetics and functionality in a perfect marriage culminating in Jonite products makes us the natural choice.

PRODUCT SPECIFICATIONS

Slip resistant

Rust & corrosion resistant

BS EN 124:2015 & 1433:2008 compliant

Dielectric properties with excellent electric insulator

Less heat absorbent than traditional ferrous grates

LEED® (Leadership in Energy and Environmental Design) green building certified

LOADING SPECIFICATIONS

Class A15 - Class D400



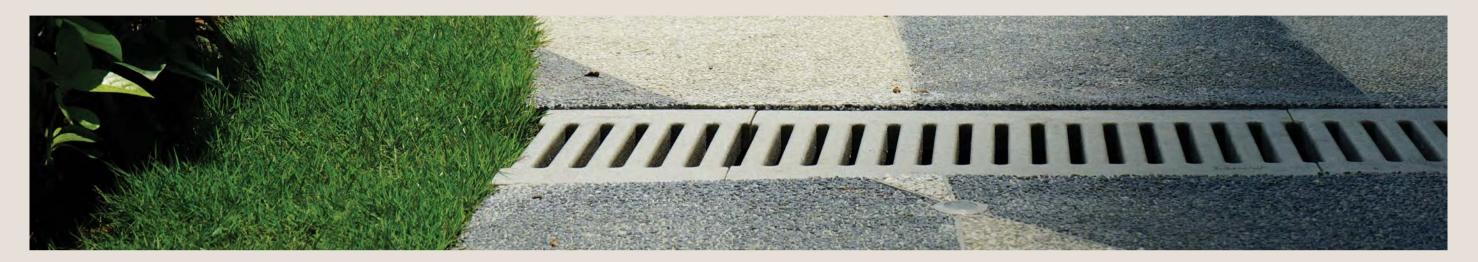






SLOTTED

Classic and clean-cut designs in compliance with BS EN 124:2015 that cover a wide range of openings. Suitable for various applications, from scupper indoor and outdoor drains to common house drains and wider drains in parks, commercial and industrial surroundings.







S1-125H25LD

Load class

Drain width

Dimension

75 to 90mm

125W x 500L x 25mm (t)



31111

S1-125H25HD

A15

B125 Load class

Drain width

75 to 85mm

Dimension

125W x 500L x 25mm (t)



31112

C1-210H25LD

A15 Load class

Drain width 128 to 170mm 210W x 500L x25mm (t)

B125

Dimension



31113

Load class

128 to 160mm Drain width

Dimension

210W x 500L x 35mm (t)

C1-210H35HD



31114

C2-292H25LD

Load class

A15

Drain width 210 to 242mm

Dimension

292W x 500L x 25mm (t)



31115

B125 Load class

Drain width

210 to 232mm

C3-355H25LD

C2-292H35HD

Dimension

292W x 500L x 35mm (t)



31116

Load class

Drain width

273 to 305mm

355W x 500L x 25mm (t) Dimension

A15



31117

C3-355H35HD

Load class B125

Drain width 273 to 295mm

Dimension

355W x 500L x 35mm (t)

TRENCH GRATES



31118

C4-435H35LD

Load class

Drain width 345 to 385mm

Dimension 435W x 420L x 35mm (t)



31119

C4-435H50HD

B125 Load class

345 to 375mm Drain width

435W x 420L x 50mm (t) Dimension



31120

C5-500H35LD

Load class A15

400 to 450mm Drain width

Dimension 500W x 365L x 35mm (t)



31121

C5-500H50HD

Load class B125

Drain width

400 to 440mm

Dimension

500W x 365L x 50mm (t)



34119C

90° S1-H25LD

Load class Suitable for

Standard S1-125H25LD



34120C

90° S1-H25HD

Load class

B125

Suitable for Standard S1-125H25HD



34110C

90° C1-H25LD

Load class

Suitable for Standard C1-210H25LD

A15



34111C

90° C1-H35HD

Load class B125

Suitable for Standard C1-210H35HD



34113C

90° C2-H25LD

Load class

A15

Standard C2-292H25LD Suitable for



34114C

90° C2-H35HD

Load class B125

Suitable for

Standard C2-292H35HD



34116C

90° C3-H25LD

Load class

A15 Suitable for

Standard C3-355H25LD



34117C

Load class

Suitable for

Standard C3-355H35HD

90° C3-H35HD



34133C

90° C4-H35LD

A15

Load class

Suitable for

Standard C4-435H35LD



34134C

Load class B125

Suitable for

Standard C4-435H50HD

90° C4-H50HD



34135C

90° C5-H35LD

Load class

A15

B125

Suitable for Stan

Standard C5-500H35LD



34136C

90° C5-H50HD

Load class

Suitable for

Standard C5-500H50HD



34121C Dimension L-TRIMMER-25LD

60W x 500L x 35mm (t)



34122C Dimension L-TRIMMER-35HD/EHD

60W x 500L x 50mm (t)



34126C

L-SLIM-TRIMMER-25LD/HD

Dimension

40W x 500L x 35mm (t)



34127C

TS-50-LD (Tile-Strip)

Dimension 50W x 500L x 10mm (t)



34129C

GT-400H25LD (Grate-Tile)

Load class

Dimension

n 400W x 400L x 25mm (t)



34131C

GT-400H35HD (Grate-Tile)

Load class B

Dimension 400W x 400L x 35mm (t)



34130C

GT-500H25LD (Grate-Tile)

Load class A15

, 0.000

Dimension 500W x 500L x 25mm (t)



34132C

Dimension

GT-500H35HD (Grate-Tile)

Load class B

B125

500W x 500L x 35mm (t)

TRENCH GRATES

COLLECTION

PRODUCTS \rightarrow

HIGH **PERFORMANCE**

Specially designed for heavy loading applications such as car-park entrances, hard-standing areas, driveways and kerb sides. L-Trimmers are recommended to ensure a flat and level seating of gratings.





32110

C1-210H35EHD

Load class C250

128 to 150mm Drain width

Dimension 210W x 500L x 35mm (t)



32111

C1-210H50CHD

D400 Load class

Drain width 128 to 150mm

Dimension 210W x 500L x 50mm (t)



32112

C2-292H35EHD

Load class

Drain width 210 to 230mm

292W x 500L x 35mm (t) Dimension

C250



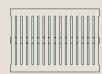
32113

C2-292H50CHD

Load class D400

Drain width 210 to 230mm

Dimension 292W x 500L x 50mm (t)



32114

C3-355H50EHD

Load class C250

273 to 285mm Drain width

355W x 500L x 50mm (t) Dimension



32115

C3-355H75CHD

Load class D400

273 to 285mm Drain width

Dimension 355W x 500L x 75mm (t)



32116

C4-435H70EHD

Load class C250

Drain width 345 to 365mm

Dimension 435W x 420L x 70mm (t)



32125

C4-435H75CHD D400

Load class

345 to 365mm Drain width

435W x 420L x 75mm (t) Dimension



32117

D1-167H35EHD

Load class C250

Drain width 100 to 117mm

Dimension 167W x 750L x 35mm (t)



32118

D1-167H50CHD

Load class

100 to 117mm

Drain width

167W x 750L x 50mm (t) Dimension

D400





32121

D3-495H75EHD

Load class C

C250

Drain width 395 to 425mm

Dimension 495W x 370L x 75mm (t)



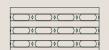
32122

D3-495H75CHD

Load class D400

Drain width 395 to 425mm

Dimension 495W x 370L x 75mm (t)



32123

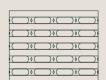
BW1-260H50EHD

Load class

Drain width 200mm

Dimension 260W x 500L x 50mm (t)

C250



32124

BW2-400H50EHD

Load class Drain width C250 330mm

Dimension

400W x 500L x 50mm (t)



34112C

90° C1-H35EHD

Load class C250

Suitable for

Standard C1-210H35EHD



34115C

90° C2-H35EHD

Load class

C250

Suitable for

Standard C2-292H35EHD



34118C

90° C3-H50EHD

Load class
Suitable for

C250

Standard C3-355H50EHD



34122C

L-TRIMMER-35HD/EHD

Dimension 60W x 500L x 50mm (t)



34123C

L-TRIMMER-50EHD/CHD

Dimension 65W x 500L x 65mm (t)



34124C

Dimension

L-TRIMMER-70EHD/CHD

65W x 420L x 85mm (t)



34125C

Dimension

L-TRIMMER-75EHD/CHD

65W x 500L x 90mm (t)



34128C

Dimension

TS-50-HD/EHD (Tile-Strip)

50W x 500L x 15mm (t)

READY-CUT

Designed for replacement purposes without any form of construction work on existing drains. The longitudinal side of the gratings has a wider edging so that they can be cut to attain the required widths.





33110

CC1-275H25LD

Load class

A15

Drain width 171 to 225mm

Dimension

275W x 500L x 25mm (t)



33111

CC1-275H35HD

Load class B125

Drain width

161 to 215mm

Dimension

275W x 500L x 35mm (t)

275W x 500L x 35mm (t)



33112

CC1-275H35EHD

Load class

C250

Drain width Dimension

161 to 205mm

33113

CC2-330H25LD

Load class

A15

Drain width 243 to 280mm

Dimension

330W x 500L x 25mm (t)



33114

CC2-330H35HD

Load class

B125

Drain width

233 to 270mm

Dimension 330W x 500L x 35mm (t)



33115

CC2-330H50EHD

C250 Load class

223 to 260mm Drain width

330W x 500L x 50mm (t) Dimension



33116

CC3-410H35LD

Load class

A15

Drain width 225 to 360mm

Dimension 410W x 500L x 35mm (t)



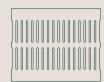
33117

CC3-410H35HD

B125 Load class

296 to 350mm Drain width

Dimension 410W x 500L x 35mm (t)



33118

Drain width

CC3-410H50EHD

Load class C250

286 to 340mm

Dimension 410W x 500L x 50mm (t)

PATTERN

Creative and imaginative designs for enhanced aesthetic flair while maintaining load strength. Available in 2 standard designs: ornate Keyholes and contemporary Baby Pebbles.

U33115

MG-PEBBLES-78

Load class

6KN

Drain width 52 to 54mm

78W x 610L x 21/25mm (t) Dimension

61115

BABY PEBBLES-86

6KN Load class

Drain width

56 to 62mm

86W x 498L x 23mm (t) Dimension

6KN

61116

BABY PEBBLES-122

Load class

Drain width

80 to 100mm

Dimension

122W x 498L x 19mm (t)

U32115

TG-PEBBLES-124

Load class 6KN

Drain width

92 to 100mm

Dimension

124W x 500L x 19mm (t)

61111

BABY PEBBLES-150

150W x 500L x 25mm (t)

Load class

6KN

Drain width

Dimension

100 to 125mm

61112

BABY PEBBLES-210

Load class

6KN

Drain width 160 to 170mm

Dimension

210W x 500L x 25mm (t)





61113

BABY PEBBLES-300

6KN

Load class Drain width

245 to 260mm

Dimension

300W x 500L x 35mm (t)

61117

Load class A15

Drain width 92 to 100mm

Dimension

122W x 498L x 22mm (t)

TG-KEYHOLES-124

KEYHOLES-122

U32112

Load class A15

Drain width

92 to 100mm

Dimension 124W x 500L x 22mm (t)

61118

6KN Drain width

Load class

250mm

Dimension

300W x 500L x 28mm (t)

KEYHOLES-300



AVANT-GARDE

Abstract and innovative designs reminiscent of rain motifs for a futuristic and non-traditional finish.



64115

CHISELED-122

Load class 6KN

Drain width 92 to 100mm

Dimension 122W x 498L x 22mm (t)



U32110

TG-CHISELED-124

Load class A15

Drain width 92 to 100mm

Dimension 124W x 500L x 22mm (t)



64116

Load class 6KN

Drain width 250mm

Dimension 300W x 500L x 28mm (t)

CHISELED-300

RAIN-SWING-300



64114

Load class

A15

Drain width 250mm

Dimension 300W x 500L x 25mm (t)

NATURE

Created with floral and leaf-inspired designs for a stylish tropical resort touch, that allows the gratings to blend in more aesthetically with different landscapes and architecture.





LEAVES-310 62111

Load class 5KN

Drain width 210 to 260mm

Dimension 310W x 335L x 25mm (t)



62112 FOREST-300

Load class 5KN

Drain width 250mm

Dimension 300W x 500L x 25mm (t)



62113

PALM-122

Load class A15

Drain width 92 to 100mm

122W x 498L x 22mm (t) Dimension



U32114

Load class A15

Drain width 92 to 100mm

Dimension 124W x 500L x 22mm (t)

PALM-300

TG-PALM-124



62114

Load class 6KN Drain width 250mm

300W x 500L x 28mm (t) Dimension



MODERN

COLLECTION

MODERN

Minimalist and clean architectural lines feature strongly in this collection, making it the best match for modern styles. Available in 3 types of designs: Cross-Stitch, Interlace, and Square Slots.



63115

CROSS-STITCH-86

Load class Drain width

A15 60mm

Dimension 86W x 498L x 23mm (t)



63116

CROSS-STITCH-122

Load class A15

Drain width 92 to 100mm

Dimension 122W x 498L x 19mm (t)

A15



U32111

TG-CROSS-STITCH-124

Load class

Drain width 92 to 100mm

Dimension 124W x 500L x 19mm (t)



63110

CROSS-STITCH-300

Load class Drain width 6KN 250mm

A15

Dimension 300W x 500L x 25mm (t)



U33112

Dimension

MG-INTERLACE-78

78W x 610L x 21/25mm (t)

Load class

Drain width 52 to 54mm

63117

INTERLACE-122

Load class

Drain width 92 to 100mm

A15

Dimension

122W x 498L x 22mm (t)



U32113

TG-INTERLACE-124

A15 Load class

Drain width 92 to 100mm

Dimension 124W x 500L x 22mm (t)



63118

INTERLACE-300

6KN Load class 250mm Drain width

Dimension 300W x 500L x 25mm (t)



63119

SQUARE-SLOTS-122

Load class A15 Drain width 80mm

122W x 498L x 19mm (t)



U32116

Dimension

TG-SQUARE-SLOTS-124LD

Load class A15

Drain width 80 to 100mm

Dimension 124W x 500L x 19mm (t)



U32117

TG-SQUARE-SLOTS-124HD

Load class Drain width

72 to 82mm

Dimension 124W x 500L x 19/35mm (t)

B125



63120

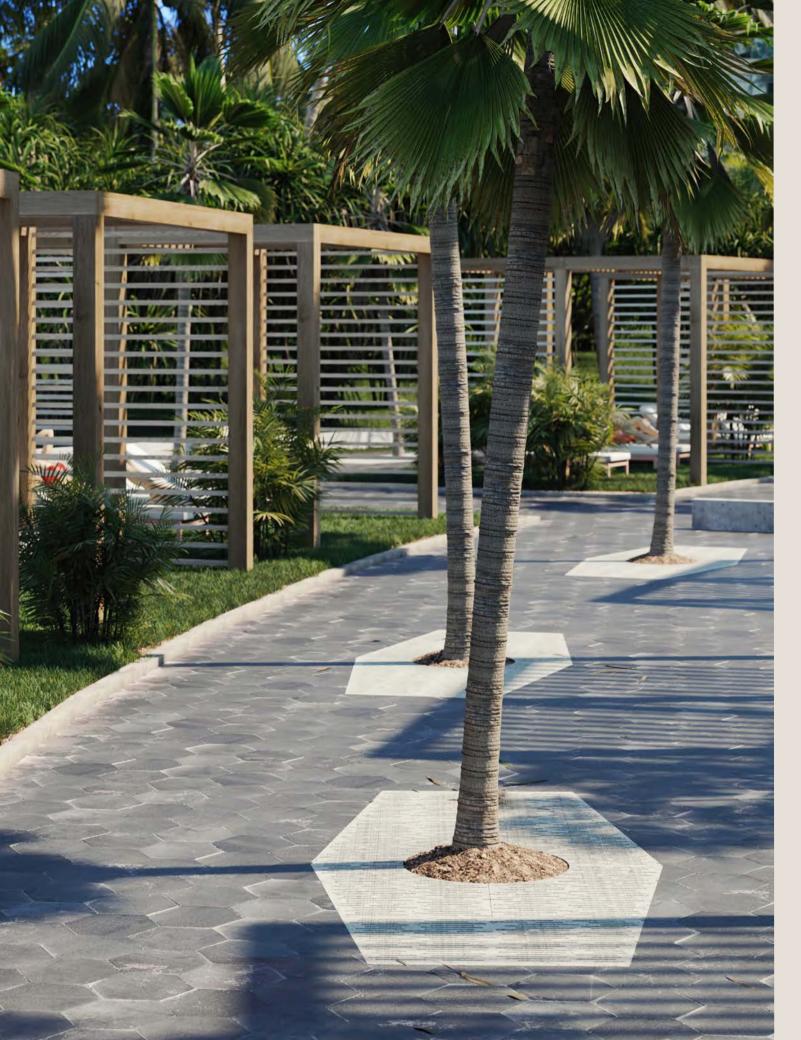
SQUARE-SLOTS-300

Load class Drain width

250mm

A15

Dimension 300W x 500L x 25mm (t)



03 PRODUCTS

 \rightarrow

TREE GRATES

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| DA. | EC |

Tree Grates

Incorporate nature's elements into any modern city and hardscape, in harmony with nature. In our concrete jungles today, trees play an essential role not just aesthetically, but also to complement the modern-day drainage system. Complete the look with Jonite reinforced stone tree grates.



ADA compliant

Complied to the Americans with Disabilities Act (ADA), selected Jonite Tree Grates are certified ADA compliant. This makes our tree grates popular in hospitals, clinics and residential areas.

Embossed Insignia

With Jonite, you can easily emboss a corporate insignia or municipal logo right onto the tree grates in use in your environment, giving it an exclusive identity to the locale.

Night Illumination

Jonite Tree Grates allows fully customisable light ports or sockets for the installation of many different types and sizes of lights for night illumination this will add an exciting dimension to the natural beauty of trees.

Expandable Rings

Some of our tree grates allow for expandability of inner diameter to accommodate the exponential growth of tree trunks during the maturity stage.

GENERAL SPECIFICATIONS

Trees are essential in landscape planning. They are having positive effects such as reducing urban warming effects, providing shade to pedestrians, and adding a focal point to your driveway.

Tree grates are vital because they help avoid soil compaction and prevent tree roots from becoming obstacles to pedestrians, thus creating more walking space.

Our tree gratings are designed with the promotion of tree protection in mind, allowing rainwater to seep through while having narrow slits to prevent litter from falling through and smothering the soil. Some of our tree grates allow for expandability of inner diameter to accommodate the exponential growth of tree trunks during the maturity stage. Add inner rings when the trees are younger, and remove as the tree matures.

Some of the Jonite tree gratings are certified ADA compliant. Making our tree grates accessible in hospitals, clinics, and public areas as wheelchair users have no issues navigating their way around the grills.

Cast-iron tree grates may be prone to theft. Jonite reinforced stone tree grilles are theft-resistant because they do not pose any value for scrap due to their stone material integrity.

Jonite tree grates have low heat absorption properties to help create a conducive environment for the trees. Using cast-iron or metal can cause surrounding temperatures to soar, which might not promote ideal growth in trees.

Our tree grille designs allow for fully customizable light ports or sockets for the installation of many different types of lighting for night illumination.

We are adding an exciting dimension to the natural beauty of trees. Efficiently emboss a corporate insignia or municipal logo right onto the tree grates in your environment, giving an exclusive identity to the locale.

We also incorporate the use of at least 30% recycled content in our products, including our tree grates. This process is our commitment to contributing to a sustainable and green environment

PRODUCT SPECIFICATIONS

ADA (Americans with Disabilities Act) compliant for selected models

Fully customizable light ports and logos

Suitable for any tree

Expandable inner diameter to allow for future tree growth

LOADING SPECIFICATIONS



5K1

Strictly for pedestrian application only





FIREWORK

One of the most popular patterns available, this collection has broad profile openings with design patterns resembling enchanting bursts of fireworks. Optional reducers can also be used to adjust the inner diameter of the tree-wells.





81110

Dimension

Inner Well

FIREWORK S1000

545mm Dia.

1000W x 1000L x 30mm (t)



81111

Inner Well

Dimension

FIREWORK S1100

600mm Dia.

1100W x 1100L x 30mm (t)



81112

Inner Well Dimension

FIREWORK S1200

600mm Dia.

46

1200W x 1200L x 30mm (t)



81113

Inner Well Dimension

FIREWORK S1500/600 (w/ light ports)

600mm Dia.

1500W x 1500L x 30mm (t)



81117

Inner Well Dimension

FIREWORK S1800/600

600mm Dia.

1800W x 1800L x 30mm (t)



81118

Inner Well Dimension

FIREWORK \$1800/750

750mm Dia.

1800W x 1800L x 30mm (t)



81115

Inner Well Dimension

FIREWORK R1500

600mm Dia.

1500mm Dia. x 30mm (t)



81119

Inner Well Dimension

FIREWORK R1800/600

600mm Dia.

1800mm Dia. x 30mm (t)



81120

Inner Well Dimension 750mm Dia.

47

1800mm Dia. x 30mm (t)

FIREWORK R1800/750

CONCENTRIC

This collection has the maximum expandability of tree-wells, with a comprehensive combination that allows for various formations. A modern ADA-compliant design with light ports and an optional fixed cover.





83110

Inner Well Dimension

CONCENTRIC S800

350mm Dia. (expandable) 800W x 800L x 30mm (t)



83113

Inner Well Dimension

CONCENTRIC S1000

350mm Dia. (expandable) 1000W x 1000L x 30mm (t)



83116

Inner Well Dimension

48

CONCENTRIC S1200

350mm Dia. (expandable) 1200W x 1200L x 30mm (t)



83119

Inner Well Dimension

CONCENTRIC S2000

600mm Dia. (expandable) 2000W x 2000L x 30mm (t)



83120

Inner Well Dimension

CONCENTRIC S2000 (w/light port covers)

350mm Dia. (expandable) 2000W x 2000L x 30mm (t)



83111

Inner Well Dimension

CONCENTRIC R800

350mm Dia. (expandable) 800mm Dia. x 30mm (t)



83114

Inner Well Dimension

CONCENTRIC R1000

350mm Dia. (expandable) 1000mm Dia. x 30mm (t)



83117

Inner Well Dimension

CONCENTRIC R1200

350mm Dia. (expandable) 1200mm Dia. x 30mm (t)



83121

Inner Well Dimension

CONCENTRIC R2000 (w/ light port covers)

350mm Dia. (expandable) 2000mm Dia. x 30mm (t)

WHEEL

The axle of the wheel inspired these elegant designs. Optional reducers can be used to accommodate the expandability of the tree-well. They can be used individually or as a combined set for a smaller tree-well.



85113

WAGON WHEEL REDUCER R800

Inner Well Dimension 500mm Dia. 800mm Dia. x 30mm (t)



85112

WAGON WHEEL R1800

800mm Dia.

Inner Well Dimension

1800mm Dia. x 30mm (t)



85110

FIRE WHEEL R1000

Inner Well

400mm Dia.

Dimension

1000mm Dia. x 30mm (t)



85111

FIRE WHEEL R2000

Inner Well

Dimension

1000mm Dia. 2000mm Dia. x 30mm (t)



87110

BURNING SUN R1200

Inner Well

400mm Dia.

Dimension

1200mm Dia. x 30mm (t)



87113

BURNING SUN R2000

Inner Well

1200mm Dia. Dimension

50

2000mm Dia. x 30mm (t)





95110

Inner Well Dimension THREAD-BALL R1500

560mm x 560mm

1500mm Dia. x 30mm (t)

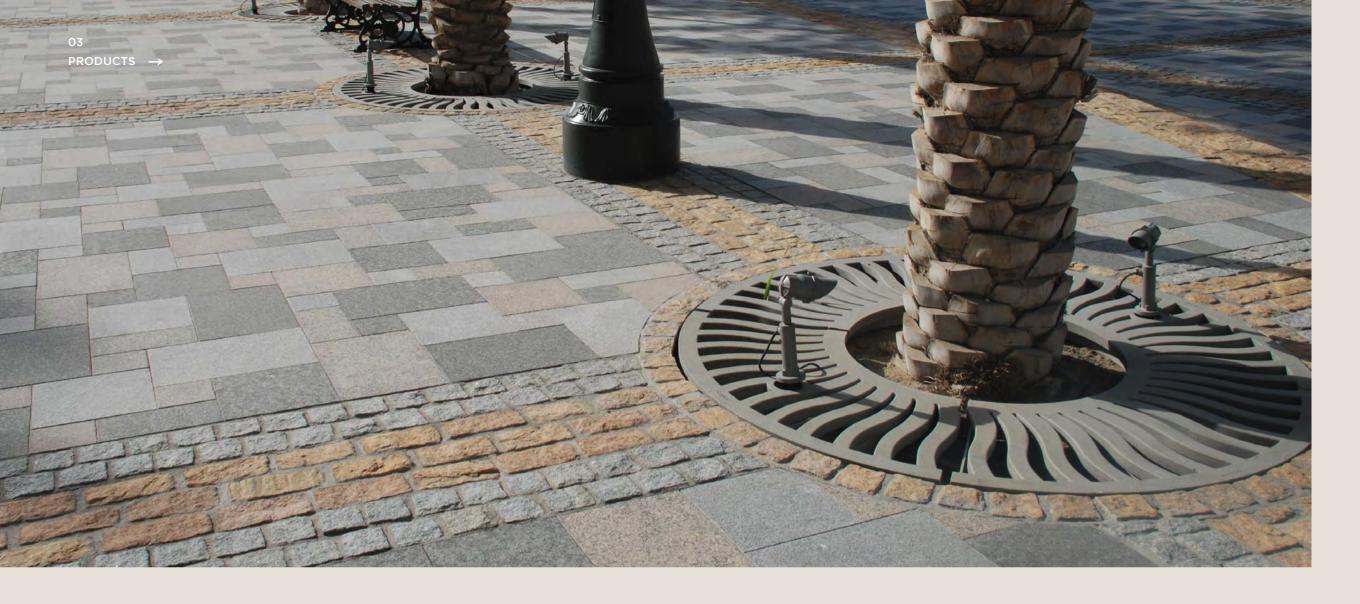


88111

Inner Well Dimension **CARRIAGE R1800**

600mm Dia.

1800mm Dia. x 30mm (t)



COLLECTION STARGRATE The designs in this collection express an explosion burst that resembles a star. Specific models come with optional light ports and inner ring expandability.



91110

STARGRATE R1500

Inner Well 700mm Dia.

Dimension

1500mm Dia. x 30mm (t)



91111

STARGRATE R1800

Inner Well 600mm Dia.

1800mm Dia. x 30mm (t) Dimension



91112

700mm Dia. Inner Well

2000mm Dia. x 30mm (t) Dimension



91113

Inner Well Dimension STARGRATE R2000/980

STARGRATE R2000/700

980mm Dia.

2000mm Dia. x 30mm (t)



COLLECTION PEBBLE HOLE

The Pebble Hole Collection comprises of different panels to form a variety of formation, with limited expandability. Well-suited for huge existing trees that are off-centre from the typical tree grate configurations.



92116

PEBBLE-HOLE R1000

Inner Well

450mm Dia.

Dimension

1000mm Dia. x 30mm (t)



92117

PEBBLE-HOLE S1200

Inner Well 450mm Dia.

1200W x 1200L x 30mm (t) Dimension



92118

Inner Well Dimension

800mm Dia.

1500mm Dia. x 30mm (t)



92119

Inner Well Dimension PEBBLE-HOLE \$1600 (w/ light ports)

PEBBLE-HOLE R1500 (w/ light ports)

800mm Dia.

1600W x 1600L x 30mm (t)

PRODUCTS \rightarrow

LARGE TREE GRATE

Beautiful reinforced stone grates with expandable tree-well created explicitly for large trees. Available in 2 types of designs: a minimalistic Centrical design with simple lines and ornate Fallen Leaves.





94110

Inner Well

Dimension

FALLEN LEAVES R2000 600mm Dia.

2000mm Dia. x 30mm (t)



94111 Inner Well

FALLEN LEAVES R3000

2000mm Dia.

3000mm Dia. x 30mm (t) Dimension



93110

CENTRICAL R4000

Inner Well

2400mm Dia.

Dimension

4000mm Dia. x 30mm (t)



94112

3000mm Dia.

Inner Well Dimension

5000mm Dia. x 30mm (t)

FALLEN LEAVES R5000



PANEL GRATE

These square and rectangular cut panel grates provide enhanced aesthetic flair. This collection comprises panels in various shapes and sizes to form any formation.



92112

PEBBLE-HOLE 600

Dimension 600W x 600L x 30mm (t)



90110

SQUARE MOSAIC 500

500W x 500L x 30mm (t) Dimension



89110

Dimension

STARCUT 1200

600W x 1200L x 30mm (t)

03

ADA

This wheelchair-friendly collection expands walking space for all pedestrians for greater accessibility. Available to suit a range of themes.



U41110 Inner Well

Dimension

CHISELED S1200

390/460/530/600mm Dia. 1200W x 1200L x 30mm (t)



U41111 Inner Well

Dimension

CHISELED S1500

390/460/530/600mm Dia. 1500W x 1500L x 30mm (t)



U42110 Inner Well

Dimension

CROSS-STITCH S1200

390/460/530/600mm Dia. 1200W x 1200L x 30mm (t)



U42111

Dimension

Inner Well

390/460/530/600mm Dia. 1500W x 1500L x 30mm (t)

KEYHOLES S1500



U43110

Dimension

Inner Well

CROSS-STITCH S1200 390/460/530/600mm Dia.

1200W x 1200L x 30mm (t)



U43111

Inner Well Dimension 390/460/530/600mm Dia. 1500W x 1500L x 30mm (t)

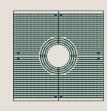
CROSS-STITCH S1500



U44110

Inner Well Dimension **INTERLACE S1200**

390/460/530/600mm Dia. 1200W x 1200L x 30mm (t)



U44111

Inner Well Dimension **INTERLACE S1500**

390/460/530/600mm Dia. 1500W x 1500L x 30mm (t)



U45110

Inner Well Dimension **PALM S1200**

390/460/530/600mm Dia. 1200W x 1200L x 30mm (t)



U45111

Inner Well Dimension **PALM S1500**

390/460/530/600mm Dia. 1500W x 1500L x 30mm (t)



U46110

Inner Well Dimension **SQUARE-SLOTS S1200**

390Wx390L Dia.

1200W x 1200L x 30mm (t)



U46111

Inner Well Dimension **SQUARE-SLOTS S1500**

390Wx390L Dia.

1500W x 1500L x 30mm (t)



03

PRODUCTS

 \rightarrow

POOL GRATES

| General Information | (|
|---------------------|---|
| Baby Pebble | (|
| Chiseled Rain | (|
| Components | (|

PRODUCTS \rightarrow

Pool Grates

Optional Features and Accessories

With its natural beauty and suitability superior to natural granite, Jonite swimming pool grates make for the perfect pool grating. We design our pool grates for overflow swimming pools. Pool surface flushes with the overflow tiles and grills, creating a perfect match for water line and nature.



Handgrip-Trimmers™

Handgrip-Trimmers™ is a safety feature that can be installed along the pool perimeter to allow a safer grip while getting out of a pool.



Grate Tiles™

Grate Tiles™ are standard non-perforated solid slabs that have the same material composition and colour as Jonite grates. They are mainly used when a drain encounters an irregular joint or to fill an odd end of a drain.



Stud Trimmers™

Pools that require more water drainage to prevent splash can use Stud-Trimmers™ with the pool grates to help improve the flow rates of the perimeter drains.



Custom Curve Grates

Curve grates are available in any radius and design upon request. All radius in a plan will be consolidated in a full-scale CAD drawing to help minimize the number of custom toolings required.

GENERAL SPECIFICATIONS

Swimming pools are no longer seen just as an amenity; today, they are part of an enticing landscape. A swimming pool can make or break an entire hardscape design.

Overflow pools are the most common type of pool in residential and commercial properties. Landscape architects can express their vision by introducing various shapes, colours, and tiles to make something completely different.

Jonite swimming pool gratings bring in natural stone beauty that adds a high-end elegance reminiscent of ancient Greece and luxurious Roman pools. Our capabilities to create custom pool grates upon request help bring your ideas to life.

Our swimming pool grates have excellent natural slip resistance, making it comfortable and safe for both children and adults, especially in frequently wet areas. The small elliptical holes of baby pebbles and thin slit slots of the chiseled rain design collection eliminate the danger of toddlers catching their toes in the grating. Our pool grates are also heat resistant, which makes the gratings more comfortable to step on in the heat of the midday sun.

Our pool gratings have a low water absorption rate of 0.5%. They maintain their colour when in contact with pool water, unlike natural stone slabs, which can discolour when in contact with water. Our pool grates are built using composite reinforcements, ensuring longevity in the swimming pool as it is corrosion-resistant.

We believe in sustainable living and preserving the environment for future generations. It is this belief that drives us in our commitment to using at least 30% recycled content in our products.

PRODUCT SPECIFICATIONS

V

Toddler-safe

Colour durability due to low water absorption

Slip-resistant

Heat resistant

Environmentally-friendly

LOADING SPECIFICATIONS

 \downarrow

A15

Strictly for pedestrian application only





BABY PEBBLE

Jonite Baby Pebble Pool Grate Collection consists of 3 standard sizes. Designed to be toddler-friendly, this contemporary collection with small slots will add character to the pool.





65110

BP245H25

Load class 6 KN

Drain width

190 to 215mm

Dimension

245W x 300L x 25mm (t)



65111

BP300H25

6 KN

Load class

Drain width 240 to 270mm

300W x 300L x 25mm (t) Dimension



65112

BP350H30

Load class

6 KN 280 to 310mm Drain width

64

Dimension

350W x 300L x 30mm (t)



67110C

90° BP245H25

Component Suitable for

BP Corner-Grate BP245H25



67111C

90° BP300H25

Component Suitable for

BP Corner-Grate BP300H25



67112C

Component Suitable for 90° BP350H30

BP Corner-Grate BP350H30



67113C

BE-BP245H25

Component

50mm BLANK-ENDS for BP245H25

245W x 300L x 25mm (t) Dimension



67114C

BE-BP300H25

65

Component Dimension

50mm BLANK-ENDS for BP300H25

300W x 300L x 25mm (t)



67115C

Dimension

BE-BP350H30

50mm BLANK-ENDS for BP350H25 Component

350W x 300L x 30mm (t)

CHISELED RAIN

Available in 3 standard sizes, the Chiseled Rain collection has an avant-garde design that will add a touch of sophistication in your pool designs.



66110

CR245H25

Load class

6 KN

190 to 215mm Drain width

Dimension

245W x 300L x 25mm (t)



66111

CR300H25

Load class

6 KN

240 to 270mm

Drain width Dimension

300W x 300L x 25mm (t)



66112

CR350H30

Load class Drain width 6 KN

Dimension

280 to 310mm

350W x 300L x 30mm (t)



68110C

90° CR245H25 **CR Corner-Grate**

Component Suitable for

CR245H25



68111C

90° CR300H25

Component

Suitable for

CR Corner-Grate CR300H25

68112C

90° CR350H30

Component Suitable for

CR Corner-Grate CR350H30

66







68113C

Component Dimension

BE-CR245H25

50mm BLANK-ENDS for CR245H25 245W x 300L x 25mm (t)



68114C

Component Dimension

BE-CR300H25

50mm BLANK-ENDS for CR300H25 300W x 300L x 25mm (t)



68115C

Component Dimension

67

BE-CR350H30

50mm BLANK-ENDS for CR350H30 350W x 300L x 30mm (t)

PRODUCTS \rightarrow

POOL GRATE COMPONENTS

These additional components help ease the installation for Jonite pool grates and also provide a bonus of aesthetic flair.



69110C

PGT-400H25

Component Dimension

POOL GRATE-TILE (regular) 400W x 400L x 25mm (t)



69112C

PGT-400H30

Component Dimension

POOL GRATE-TILE (regular) 400W x 400L x 30mm (t)



69111C

PGT-500H25

Component Dimension

POOL GRATE-TILE (large) 500W x 500L x 25mm (t)



69113C

PGT-500H30

Component Dimension

POOL GRATE-TILE (large) 500W x 500L x 30mm (t)



69114C

Suitable for Dimension

L-TRIMMER 25-PG

All Pool Grates of 25mm (t) 60W x 300L x 35mm



69115C

L-TRIMMER 30-PG

Suitable for Dimension

All Pool Grates of 30mm (t) 60W x 300L x 40mm



69116C

Suitable for Dimension

STUDS-TRIMMER 25-PG

All Pool Grates of 25mm (t) 60W x 300L x 40mm



69117C

STUDS-TRIMMER 30-PG

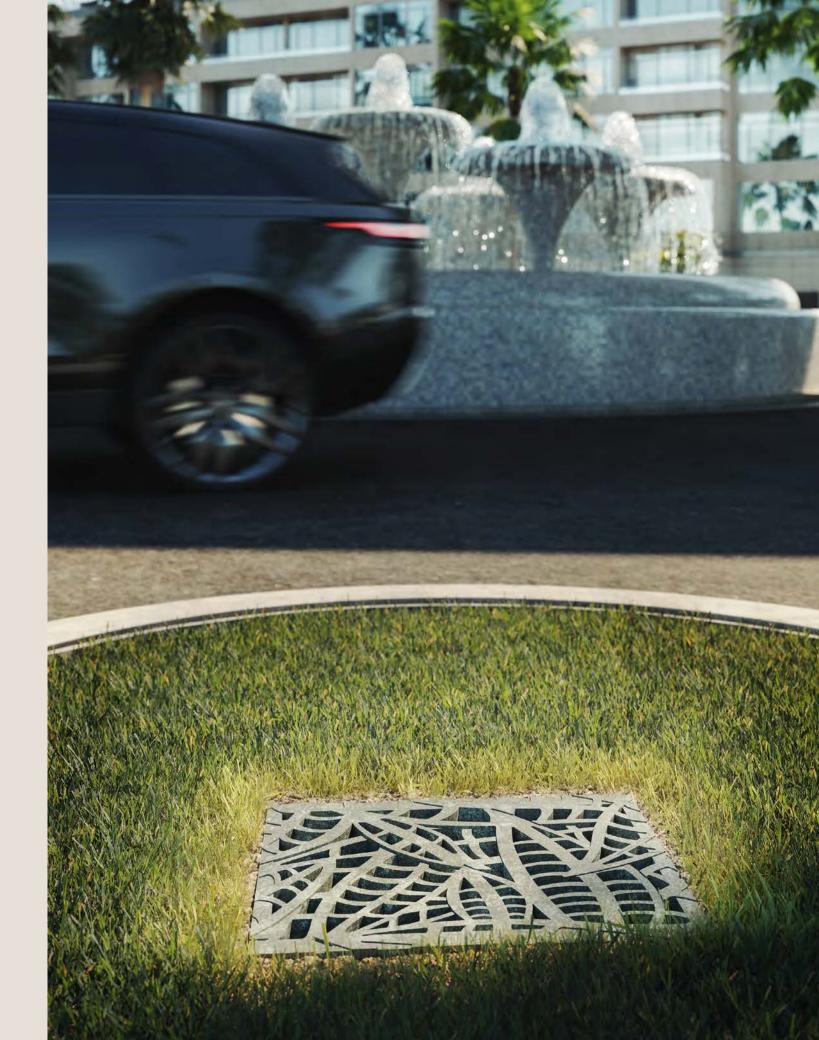
Suitable for Dimension

All Pool Grates of 30mm (t) 60W x 300L x 45mm

03 PRODUCTS

SUMP COVER

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PRODUCTS \rightarrow

Sump Cover

Optional Features and Accessories

Add natural, modern stone aesthetics to your designs for point drainage systems. Our reinforced stone technology ensures that you can incorporate elegant stone into your design while ensuring optimum load strength.



Custom Lockables

Custom lockable sump covers are available upon request and can be available for all applications and sizes. L-Trimmer Frames™ is optional.



L-Trimmer Frames™

L-Trimmer Frames™ is mainly used for supporting sump covers, especially for heavy-duty applications. They provide a perfectly flat surface and seating allowance to maximise the performance of the sump cover.



Custom Hinged

Custom hinged sump covers are available upon request though they are limited to specific applications and sizes. The exposed hinge components are made of stainless steel with weather-proof polyurethane dampers.



Large Custom Sump Covers

A custom metal supporting frame can be designed to help support large sump covers with multiple panels.

GENERAL SPECIFICATIONS

The humble sump cover, or maintenance hole cover, first began life in the Roman Empire as slabs of stone or wood placed over point drainage systems that allowed maintenance workers access to covered drains carrying wastewater and sewage.

This omnipresent sump cover is the basis of inspiration for Jonite's designs, in which we aim to showcase the beauty of stone with modern technology and excellent craftsmanship.

Today, point drainage systems are found everywhere in the streets, commercial factory areas, residential areas, and more. Point drains require covers to prevent environmental contamination and prevent accidental falls. With Jonite point drain covers and sump grates, architects no longer face the problem of having to place these openings in inconspicuous areas, but instead can use these catch basin grates as an additional design element.

Lower urban temperatures by choosing Jonite sump covers with low heat absorption compared to traditional metal or cast iron grates. Traditional metal or cast iron grates absorb heat during the day, which can create the urban heat island effect through the raised temperature for surrounding buildings. Jonite sump covers were designed to combat the effects of urban warming, which is rapidly becoming a severe issue for cities in the changing climate.

The unique material properties of Jonite products prevent rust and corrosion such that they are equally suited to last a lifetime for both indoor and outdoor applications. It is also theft-resistant, as Jonite hardscape products do not pose any value for scrap due to their stone material integrity.

Jonite catch basin grates and sump grates come in a wide range of standard sizes that can be assembled with the addition of Jonite splines to form huge covers. This feature gives you the added edge of cost-effectiveness and sustainability. For multiple sump covers, a metal sub-frame may be used. Optional Jonite Trimmer Frames can be used to provide aesthetic flair and high-performance support for the heavy-duty channel and sump grates.

PRODUCT SPECIFICATIONS

Low heat absorption

Rust and corrosion resistant

Extreme strength and durability

BS EN 124:2015 & 1433:2002 compliant

Dielectric properties with excellent electric insulator

Flexible sizes with the use of Jonite splines to form huge covers

LOADING SPECIFICATIONS

Class A15 - Class D400









COLLECTION

SLOTTED

Sump covers with classic slotted designs in a variety of standard sizes and shapes for quick matches to your designs.





51110

SC300-300H25LD

Load class A15

Pit Size

250 x 250mm

Dimension 300W x 300L x 25mm (t)



51111

SC300-300H35HD

Load class B125

230 x 230mm Pit Size

300W x 300L x 35mm (t) Dimension



51112

SC300-600H25LD

Load class

Pit Size 230 x 230mm

Dimension 300W x 600L x 25mm (t)

A15



51113

SC300-300H35HD

Load class B125

Pit Size 240 x 540mm

Dimension 300W x 600L x 35mm (t)



51120

SC400-400H35LD

A15 Load class

Pit Size 350 x 350mm

400W x 400L x 35mm (t) Dimension



51121

SC400-400H35HD

Load class B125

Pit Size 340 x 340mm

Dimension 400W x 400L x 35mm (t)



51122

SC400-500H35LD

Load class

A15

Pit Size 350 x 450mm

Dimension 400W x 500L x 35mm (t)



51123

SC400-500H35HD

Load class

Pit Size 340 x 440mm

B125

Dimension 400W x 500L x 35mm (t)



51124

SC420-625H35LD

Load class

A15 Pit Size 370 x 575mm

Dimension 420W x 625L x 35mm (t)



51125

SC420-625H35HD

Load class B125

Pit Size 360 x 565mm

420W x 625L x 35mm (t) Dimension



51126

SC435-873H35LD

Load class

Pit Size 385 x 823mm

Dimension 435W x 873L x 35mm (t)



51127

SC435-873H35HD

B125 Load class

375 x 813mm Pit Size

435W x 873L x 35mm (t) Dimension



51128

SC500-500H35LD

Load class A15

450 x 450mm Pit Size

500W x 500L x 35mm (t) Dimension



51129

SC500-500H35HD

Load class

B125 Pit Size 440 x 440mm

Dimension 500W x 500L x 35mm (t)



51130

SC550-550H35LD

Load class A15

Pit Size

500 x 500mm

Dimension

550W x 550L x 35mm (t)



51131

SC550-550H50HD

Load class

B125

Pit Size 490 x 490mm Dimension 550W x 550L x 50mm (t)



53110C

TRF300-300H25

Suitable for

SC300-300H25LD



53111C

Suitable for

TRF300-300H35 SC300-300H35HD



53112C Suitable for

TRF300-600H25 SC300-600H25LD



53113C

Suitable for

TRF300-600H35

SC300-600H35HD



53114C Suitable for

TRF400-400H35 SC400-400H35LD / HD



53115C

TRF500-500H35

Suitable for

SC500-500H35LD / HD

COLLECTION

HIGH **PERFORMANCE**

Reinforced stone sump covers, specifically created to withstand heavy vehicular loads up to 400KN. Available in various sizes.







SSC300-600H35EHD

Load class Pit Size

C250

230 x 530mm

Dimension

300W x 600L x 35mm (t)



52121

SSC300-600H50CHD

Load class Pit Size

230 x 530mm

D400

Dimension

300W x 600L x 50mm (t)



52110

SSC350-700H50EHD

350W x 700L x 50mm (t)

Load class

C250 Pit Size 280 x 630mm

Dimension



52117

SSC350-700H75CHD

Load class Pit Size

D400 280 x 630mm

Dimension

350W x 700Lx 75mm (t)



52122

Dimension

SSC400-400H50EHD

400W x 400L x 50mm (t)

SSC400-400H75CHD

Load class

C250

Pit Size 340 x 340mm

52123

Load class

D400

Pit Size 330 x 330mm

Dimension 400W x 400L x 75mm (t)



52118

SSC500-500H50EHD

500W x 500L x 50mm (t)

Load class C250

Pit Size 430 x 430mm



52119

SSC500-500H75CHD

Load class

Pit Size 430 x 430mm

D400

Dimension

Dimension

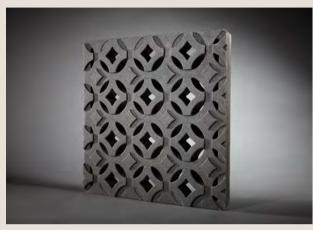
500W x 500L x 75mm (t)

COLLECTION

BASIN GRATES

Perfectly shaped to be compatible with the most common catch basins in the USA, Jonite reinforced stone Basin Grates can be matched to other Jonite products for a seamless finish through your design.







U31110

BG-CHISELED-300

Load class

A15

Dimension 300W x 300L x 29/32mm (t)



U31111

BG-CROSS-STITCH-300

Load class A15

Dimension

300W x 300L x 29mm (t)



U31112

BG-KEYHOLES-300

Load class A15

Dimension

300W x 300L x 29/32mm (t)



U31113

BG-INTERLACE-300

Load class

A15

300W x 300L x 29/32mm (t) Dimension



U31114

BG-PALM-300

Load class A15

Dimension 300W x 300L x 29/32mm (t)



U31115

BG-PEBBLES-300

Load class

6KN

300W x 300L x 29mm (t) Dimension



U31116

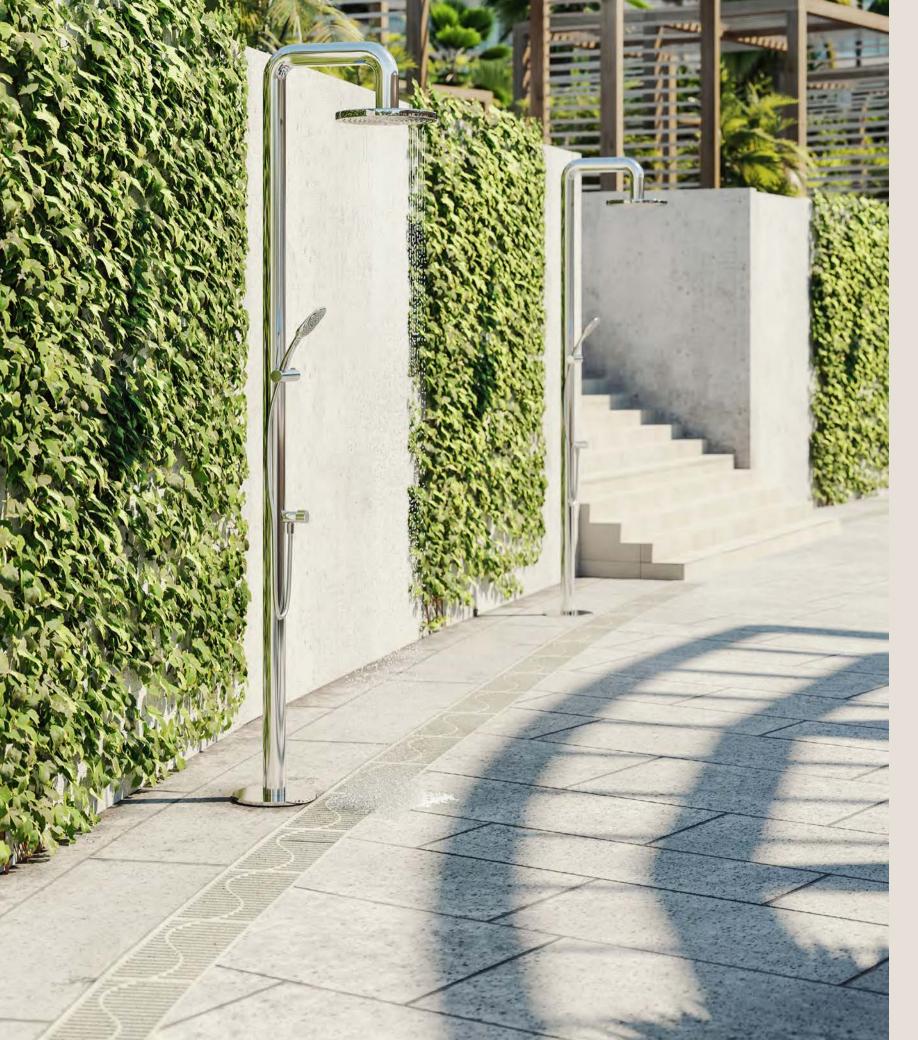
Dimension

BG-SQUARE-SLOTS-300

Load class

A15

300W x 300L x 29mm (t)



03 PRODUCTS

BATHROOM GRATES

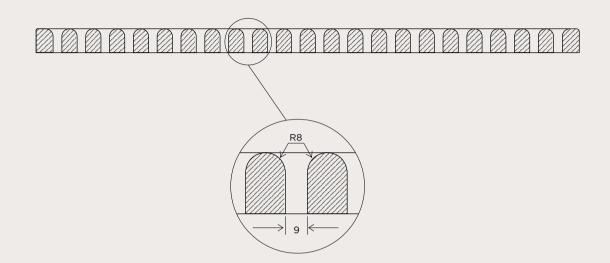
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Waveline 88

PRODUCTS \rightarrow

Bathroom Grates

Toilets redefined

Inventors of the world's first reinforced stone bathroom grates. An aesthetically pleasing and cost-effective alternative to stainless steel grates. More than merely bathroom drain covers, we think of our bathroom gratings as a culmination of ancient history and modern technology. With natural stone textures, Jonite bathroom grates add a modern and elegant flair to public bathrooms.







Slotted

Waveline

Rounded Edge Profiles

With its specially rounded curve profiles, liquids are easily flushed away from the surface of the grates. This prevents any liquids from stagnating on the surface as well as easy cleaning and maintenance. Even with the rounded curve profiles, the matte stone texture still provides natural slip resistance.

Customisation

Jonite Bathroom Grates comes in two standard designs, the Slotted and the Waveline. They are fully customisable, in terms of colours, designs, sizes and textures, they are all available upon request.

GENERAL SPECIFICATIONS

Jonite created the world's first reinforced stone bathroom grates. In the past, the only option for architects when designing drainage coverings for public toilets was stainless steel grates which were expensive and slippery.

Now, countless architects have used Jonite bathroom grates in public bathrooms to create modern, beautiful, hygienic, and safe toilets.

Beautifully crafted and created to drain excess and wastewater effectively, Jonite bathroom grates are used in urinals, cubicles, and even washbasins in public bathrooms. Architects and interior designers choose our reinforced stone toilet gratings because our grates can be blended with the colours of floor tiles to create a seamless finish.

Our bathroom gratings' rounded curve profiles and matte stone textures also provide slip resistance. Furthermore, Jonite bathroom gratings are easy to maintain without the need for any acid wash and have low water absorption, minimizing the propensity to staining.

Jonite bathroom grates contribute toward satisfying MR Credit 4: Recycled Content under LEED®. The LEED® Green Building Rating System is the nationally accepted benchmark for the design, construction, and operation of high performance green buildings in the U.S.A...

A robust sewerage system for public bathrooms is so essential in providing a comfortable, clean, and pleasant experience for users. More than just serving a sanitation function, we believe that our bathroom and toilet grates are a culmination of ancient history. Stone featured prominently in classical Roman bathrooms and modern technology through the (reinforced) stone.

PRODUCT SPECIFICATIONS

 \downarrow

Natural aesthetics

Slip-resistant

Less susceptible to stains

Easy to maintain

MR Credit 4: Recycled Content accredited under LEED

LOADING SPECIFICATIONS

V

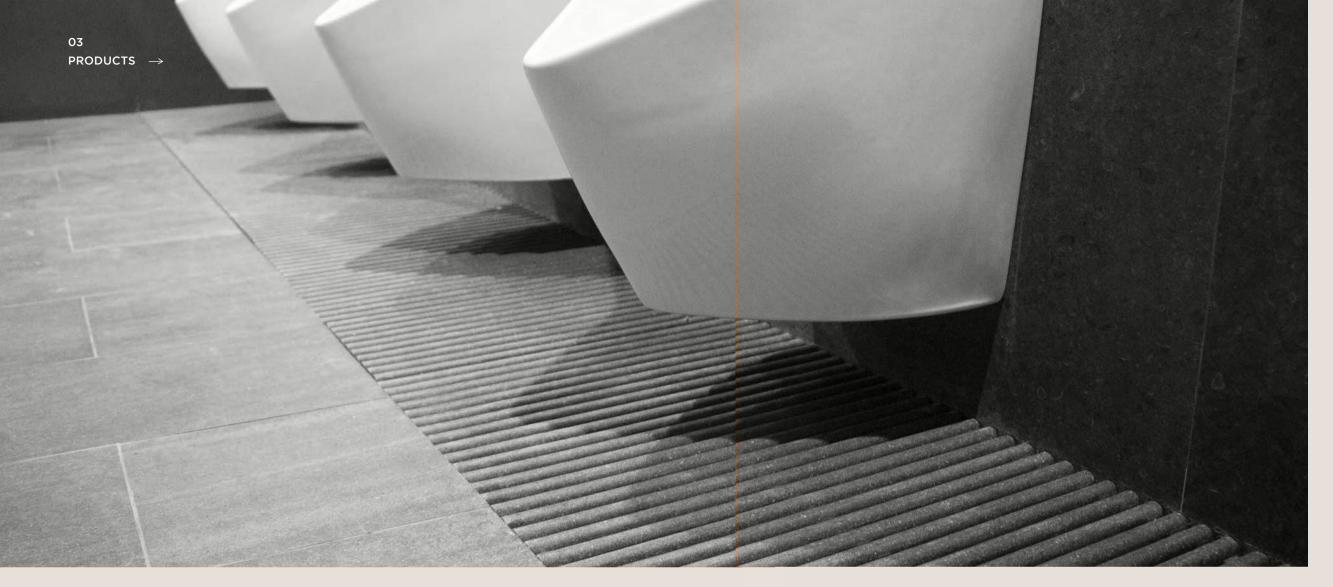
A15

Strictly for pedestrian application









COLLECTION SLOTTED

Minimalistic bathroom grate designs that blend in seamlessly with the bathroom floor.



12110

TGS-200

Load class A15

Drain width 159mm to 164mm

200W x 500L x 25mm (t) Dimension



12112

TGS-250

86

A15 Load class

Drain width 209mm to 214mm Dimension 250W x 500L x 25mm(t)



12113

Load class A15

Drain width 259mm to 264mm Dimension

Bone-500

TGS-300

300W x 500L x 25mm (t)



12114

Load class 6KN

Drain width

455mm to 464mm 500W x 250L x 30mm (t) Dimension

COLLECTION

WAVELINE

This waves-inspired collection of bathroom grates lend a modern touch to the bathroom floor for an additional creative aesthetic.





11110

WAVELINE-185

Load class

Drain width Dimension

A15

150mm to 155mm

185W x 500L x 20mm (t)



11112

WAVELINE-220

Load class

Drain width

179mm to 184mm

A15

220W x 500L x 25mm (t) Dimension



11113

WAVELINE-250

Load class

A15 Drain width 209mm to 214mm

Dimension

250W x 500L x 25mm (t)



11114

Load class

Drain width

WAVELINE-275

A15

234mm to 239mm

Dimension 275W x 500L x 25mm (t)



11115

Load class

Drain width Dimension

6KN

459mm to 464mm

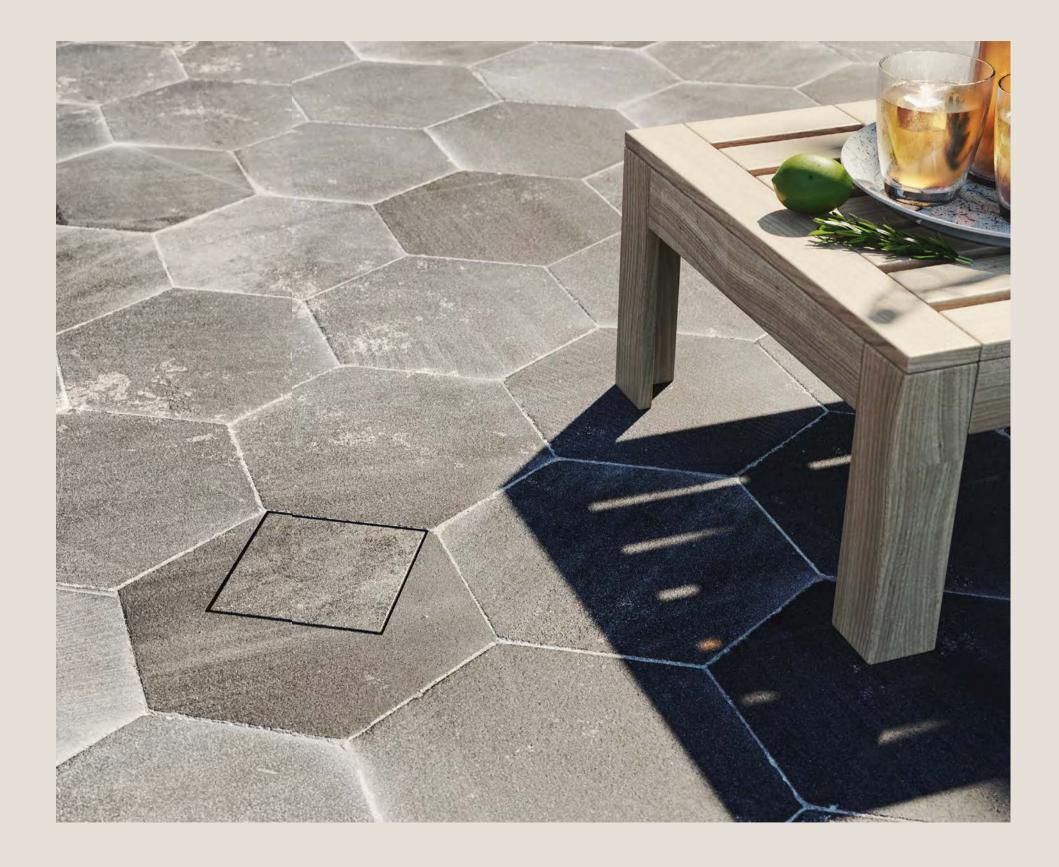
WAVELINE-500

500W x 250L x 25mm (t)

03 PRODUCTS

FLOOR DRAINS

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| Driveway | 9 |
| Hinged | 9 |
| Classic | 9 |
| Modern | 9 |



FLOOR DRAINS

Floor Drains

Floor-bonded

Jonite's homogenous stone floor drains can match any tile to form a trap cover, achieving desired coherence with functional designs. We aim to continue designing floor drains that blend seamlessly into any flooring.



Tile-Up™ Collection

Clean, seamless and corrosion-free, our Tile- Up^{TM} Collection uses existing floor tiles with slit gaps as the solution preferred by architects. An alternative to the usual option of raw concrete screeds, unstable covers and untidy holes, the Tile- Up^{TM} Collection is aesthetically pleasing, easy to install and an effective system.



Classic Collection

The classic collection is exclusive with the use of Jonite stone, durable yet aesthetically pleasing. You will be pampered with a choice of 16 different standard colours or unlimited custom colours.



Hinged Collection

Do away with the hassle of handling of floor traps; our Hinged Collection is the perfect partner for applications that requires frequent access to the pipes for cleaning.



Modern Collection

Complete your drain application with style and practicality; our modern collection offers everything except the mundane features of a typical floor trap.



Odour & Insect Resistant

Jonite floor drains are designed to accommodate PVC strainers and foul-air restrainers to prevent insects and unpleasant odours from arising.

GENERAL SPECIFICATIONS

Once considered a luxury only for the rich in ancient Rome, the toilet or WC has become a familiar and necessary sight in the modern home. Many designers focus on various fixtures to provide comfort for their clients, but the humble floor drain is often overlooked.

However, adding floor drains and point drains is not only necessary and but also considered a great design because it enables easy toilet maintenance. Stagnant water in the toilets can damage the flooring in the long term and become a hotspot for mosquito breeding in the tropics. Good floor drains can prevent stagnant water from pooling up and can allow for some stains to be cleansed and removed.

Waterproofing is foremost in our floor drain cover designs, as is the prevention of infiltration by insects and foul air. Special PVC strainers and restrainers fitted with our floor drain traps work to achieve a cleaner environment, giving bathroom users a more pleasant and hygienic experience.

Jonite floor drains are engineered to fulfil crucial functions while remaining an integral component of the structural floor. Our most popular series is the Tile Up collection where any tile can be used to create a seamless look and feel throughout the bathroom.

Jonite floor drains are available in a wide range of standard colours developed to assist landscape architects in quickly picking the colour they need. More specialized colours are also possible with our colour customization process, allowing any hue or shade desired.

PRODUCT SPECIFICATIONS

 \downarrow

Modern aesthetics

Easy to maintain

Extreme strength and durability

Prevents foul smells and insects

Special PVC strainers and restrainers fitted

LOADING SPECIFICATIONS

 \downarrow

5KN

Strictly for pedestrian application





COLLECTION

PRODUCTS \rightarrow

TILE-UP

One of our most popular collections amongst interior designers, this collection enables you to use any tile to create a point drain cover with all of Jonite's floor drain functionalities.



71111

FTUS-90/100

Component Dimension

Tile-up Trap (Shower Square)
100W x 100L x 22mm (t)



71110

FTUS-148/158

Component Dimension

Tile-up Trap (Square) 158W x 158L x 30mm (t)



Created specifically for use in driveway drainage, this collection is available in 2 standard designs.



75110

Dimension

10

Component Di

FHS-158/200HD Driveway Trap (B125) 200W x 200L x 45mm (t)



75111

FHS-158/200HD Blank

Component Dimension

Driveway Trap Blank (B125) 200W x 200L x 45mm (t)



HINGED

Do away with the hassle of handling of floor traps; our Hinged Collection is the perfect partner for applications that requires frequent access to the pipes for cleaning.



72113

FHS-125/158

Component Dimension

Hinged Trap (Square) 158W x 158L x 30mm (t)



72114

FHS-125/158 Blank

Component Dimension

Hinged Trap Blank 158W x 158L x 30mm (t)



72115

FHS-125/158 Dome

Component Dimension

Hinged Trap Dome 158W x 158L x 30(45)mm (t)



72110

.

Component Dimension

FHS-125/200

Hinged Trap (Large)
200W x 200L x 30mm (t)



72111

Component

FHS-125/200 Blank

Dimension

Hinged Trap Blank (Large) 200W x 200L x 30mm (t)



72112

Component

FHS-125/200 Dome

Dimension

Hinged Trap Dome (Large) 200W x 200L x 30(45)mm (t)



CLASSIC

While retaining the features of conventional floor traps, the classic collection is exclusive with the use of Jonite stone, durable yet aesthetically pleasing.



The modern collection of floor drains complement minimalist designs while retaining its functionality and durability.



73112 Component

Dimension

FCR90/100 Shower

Classic Shower Trap (Round) 100mm Dia. x 25mm (t)



74110

Component Dimension

FMAS-135/158

Modern Americ Square 158W x 158L x 30mm (t)



73111

FCSR-135/158

Component Classic Square Trap (with Round cover)
Dimension 158W x 158L x 30mm (t)



74111

Component Dimension

FMAR-145/165

Modern Americ Round 165mm Dia. x 30mm (t)



73110

Component Dimension

96

FCR-145/165 Classic Round Trap

165mm Dia. x 30mm (t)

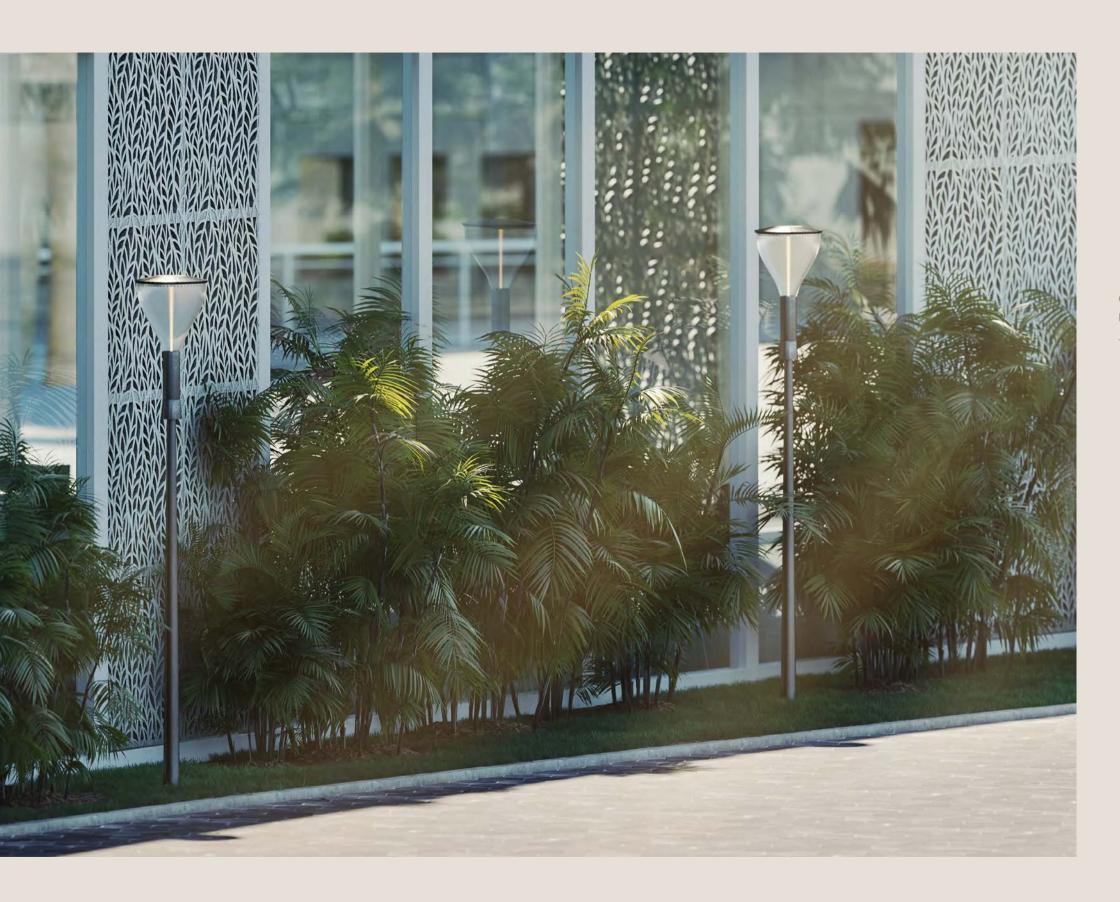


74112

Component Dimension

FMSR-145/165

Modern Slotted 165mm Dia. x 30mm (t)



O3 PRODUCTS

VENTILATION GRILLES

Forest 100
General Information 101

Ventilation Grilles

One of our newest lines of products, the ventilation grate is a natural extension of our existing reinforced stone hardscape products.

Ventilation can now be beautiful and multi-purpose, enabled by our highly customizable designs and excellent load-bearing strength.



FOREST

Inject tropical vibes into your design with this collection of reinforced stone ventilation grilles inspired by the forest.



65110

FOREST-VG-300

Drain width Dimension 250mmW (max.) 300W x 500L x 25mm (t)



6511

FOREST-VG-445

Drain width Dimension 385mmW (max.) 445W x 490L x 35mm (t)

GENERAL SPECIFICATIONS

Ventilation is of primary concern to architects. When designed well, it can make a building come alive and can help building owners achieve green energy savings through improved ventilation. Every building design is unique. Therefore the Net Free Area requirements for ventilation grilles can vary vastly.

Here at Jonite, with over 20 years of experience in the materials industry partnering with landscape architects, we understand this deeply. All of our decorative ventilation grilles can be customized to fit your requirements for open area percentage of ventilation, span, or design.

Traditional metal ventilation grilles are typically highly functional but non-decorative. We design our ventilation grilles with the aspiration of bringing an exciting alternative to aluminium or metallic alloy ventilation grilles through the introduction of beautiful reinforced stone products.

Architects can expand their hardscape, and urban designs to anywhere their imagination bring them. Ventilation grilles no longer need to be hidden, concealed, or minimized- but can become an entire design highlight or blended into the other hardscape design elements.

Leverage on Jonite ventilation grilles' excellent load-bearing strength, architects can now incorporate ventilation in other applications that were not possible in the past. Architects have used the power of our grates to circumvent safety issues of ventilation being situated directly above the basement car parks. Other architects have used Jonite custom ventilation grilles for multiple purposes as both ventilation and a walking platform. This custom feature opens up an exciting avenue to express creativity and create something unique. The possibilities are endless, as you can specify it and we can custom-build it.

PRODUCT SPECIFICATIONS

 \downarrow

Highly customizable

Beautiful modern aesthetics

Excellent load-bearing strength

Unlimited colours and designs

LOADING SPECIFICATIONS

 \downarrow

5KN - Class D400

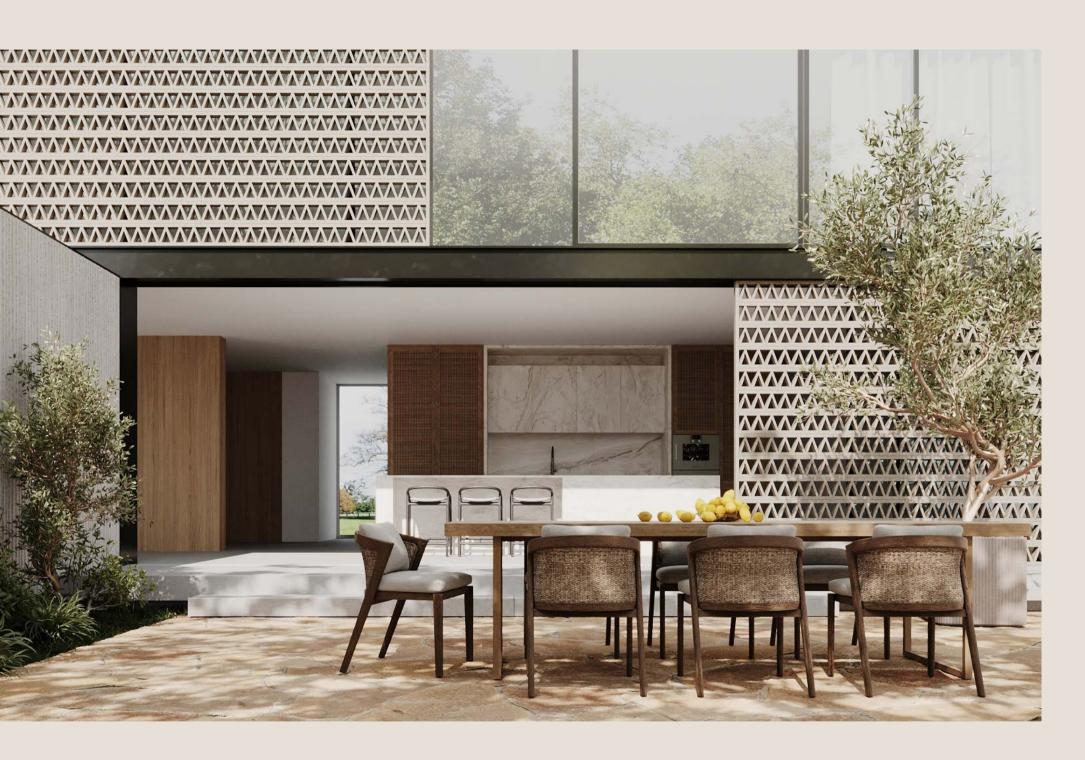












03 PRODUCTS

BREEZE BLOCKS

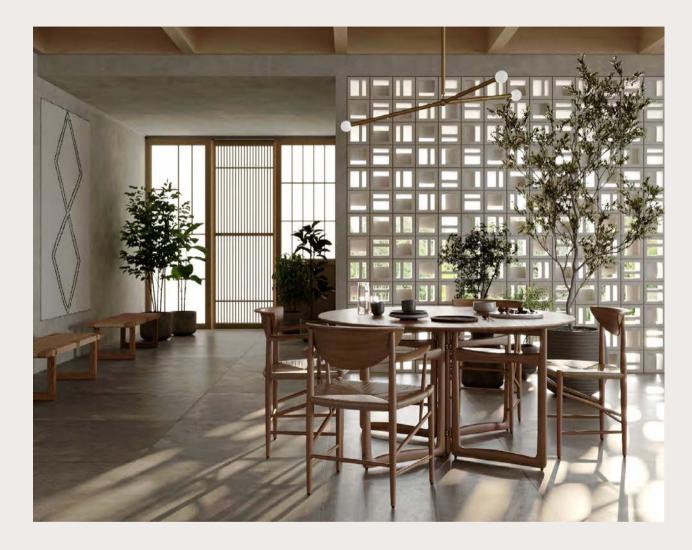
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Elementa 107

PRODUCTS \rightarrow

Breeze Blocks

Elevate your designs with Jonite Breeze Blocks, an emblem of architectural sophistication within our exclusive stone composite product range. Enhance landscapes, hardscapes, and interiors across residential and commercial domains, embodying a vision of unmatched grace and allure.



Authentic Stone Appeal

Immerse yourself in the enduring allure of stone, impeccably captured in our diverse palette of colors and designs.

Exceptional Performance & Durability

Discover the unmatched strength and resilience of our proprietary Jonite stone composite material, setting a new standard in architectural excellence.

Sophisticated Self-Cleaning

Benefit from our cutting-edge self-cleaning technology with anti-algae properties, ensuring enduring beauty and effortless maintenance.

Unrivalled Customization

At Jonite, your design reigns. Personalize sizes, colours, patterns, strength, and open areas to create unique breeze blocks that authentically reflect your architectural vision.

GENERAL SPECIFICATIONS

Inspired by the collective brilliance of world-renowned architects, Jonite proudly presents the latest masterpiece in our premium architectural stone product portfolio – the Jonite Breeze Block. Developed by Jonite, this revolutionary product represents the ideal fusion of elegant design, superior materials, and state-of-the-art technology, appealing to the refined tastes of landscape architects, architects, and interior designers.

With Jonite Breeze Blocks, seamlessly enhance your external hardscape, landscape, and interior projects across residential and commercial developments, transforming your creations into architectural marvels.

Crafted from our proprietary Jonite stone composite material, renowned for its exceptional performance across our product range, the Jonite Breeze Block offers low water absorption, unmatched durability, high compressive strength, and an extensive variety of natural stone aesthetics. Our dedication to quality and innovation ensures that every Breeze Block stands as a testament to the enduring elegance of natural stone. Safety remains paramount in all architectural endeavours, and the Jonite Breeze Block adheres to this principle. Rigorously tested and certified Class 1 for flame spread according to BS 476: Part 7: 1997, you can confidently integrate Jonite Breeze Blocks into your designs, meeting the strictest safety standards.

The Jonite Breeze Block's unrivalled customization possibilities set it apart. Our diverse collection of designs and colours empowers you to realize your unique vision. For truly bespoke creations, our team of experts is ready to collaborate, crafting custom designs that encapsulate your artistic expression.

In addition, the Jonite Breeze Block features advanced antialgae selfcleaning properties, ensuring enduring beauty with minimal maintenance. This innovative aspect guarantees pristine appearances while simplifying up keep.

Discover the harmonious blend of artistry and innovation with the Jonite Breeze Block, and elevate your architectural projects to unparalleled heights. Redefine design excellence with this exceptional product that skilfully unites form and function. PRODUCT SPECIFICATIONS

Natural stone aesthetics

Class 1 fire rating

Low heat and water absorption

Anti-algae self cleaning

Bespoke customization



MODUBLOC MODUBLOC

Discover limitless potential with ModuBloc: Quadra's artful rectangular openings blend seamlessly with Bevel's distinguished sloping profile. Unite these versatile breeze blocks to create custom configurations that elevate your architectural landscape.



68100

QUADRA-200

Component Dimension

Breeze Block (Square) 200 x 200 x 75mm (t)



68200

BEVEL-200

Component Dimension

Breeze Block (Square) 200 x 200 x 75mm (t)



Embrace the beauty of geometry with Elementa: Vista's continuous double triangles and Nexus's pristine, concentric circle enchant and inspire. Allow these singular, minimalist breeze blocks to command attention, amplifying the core of your design ethos.



68300

VISTA-250

Component Dimension

Breeze Block (Rectangle) 250 x 200L x 75mm (t)



68400

NEXUS-200

Component Dimension

Breeze Block (Square) 200 x 200 x 75mm (t)



03 PRODUCTS

 \rightarrow

STREET BENCHES

| eneral Information | 1 |
|--------------------|---|
| 2 | 1 |
| | 1 |

Street Benches

Stone street furniture doesn't have to be heavy and bulky. It can be sleek and modern but still be able to withstand the elements — rain, sun, sleet, snow, or more. Jonite's versatile panels make the perfect site furnishing such as street benches.



Philosophy

The Banco Series is created using contemporary, ergonomic and versatile designs of structure elements such as pedestals and panels using various Jonite creative panels. Customisable with unlimited colours, patterns & textures.

Custom Design on Panel Grates

The Banco Benches can easily create exclusive designs representing a corporate insignia or municipal logo on the panel-grate, giving a unique identity to parks or commercial open spaces.

GENERAL SPECIFICATIONS

Street furniture plays a ubiquitous part of street design. When deciding on what type of site furnishing and where to place them, landscape architects not only have to consider aesthetics and functionality. The impact the street furniture has on road safety, pedestrian mobility, and the city's visual identity is also essential.

A growing movement in architecture is to provide green spaces as a counterbalance to modern city skylines. Architects have a fine line to tread between the balance of nature and modern architecture. Public areas such as parks are the perfect stages to accomplish this goal- and what better way to add a further touch of life through natural stone site furnishing?

Jonite's Banco street bench is a natural extension of our existing line of grates and panels. This new line of site furnishing offers a unified look throughout your design from drainage grates to street furniture.

Our Banco street benches are created to be ergonomic and versatile. Come in fully knock-down or pre-assembled systems to accommodate standard or customized components while being sturdy and cost-effective. Our R&D team worked towards a vision of sleek and modern designs, breaking the mould of large and heavy stone street benches.

Easily add creative and beautiful touches through the creation of unique designs featuring a corporate insignia or municipal logo on the panel-grate, giving an exclusive identity to the parks or commercial open spaces.

If you would like to go beyond street benches, our experienced R&D team can work with you to create custom street furniture and site furnishings for imaginative applications. Refreshing, exciting, and unified reinforced stone finishes in unexpected places will create a new depth in your designs.

At least 30% of our Banco street furniture is made of recycled products: this is our way of contributing to a green and sustainable environment.

PRODUCT SPECIFICATIONS

 \downarrow

Sturdy & ergonomic

Extreme load-bearing strength

Customizable logos and designs

Low heat absorption

LOADING
SPECIFICATIONS

 \downarrow

5KN

Strictly for seating application



COLLECTION

BR

The BR series consists of street benches with ergonomic backing designed for the comfort of users. Available in 2-seater or 3-seater standard configurations.



21110

Dimension

BR 300-2 SEATER

1150L x 823W x 780mmH



21111

Dimension

112

BR 300-3 SEATER 1700L x 823W x 780mmH COLLECTION

SS

The SS series comprises of benches without backing, to provide uninterrupted sightlines, bringing the spotlight onto the natural surroundings. Available in 2 seating configurations.

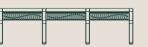


21112

Dimension

SS 210-2 SEATER

1150L x 638W x 447mmH



21113

Dimension

SS 210-3 SEATER 1700L x 638W x 447mmH



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MAINTENANCE \rightarrow

Maintenance Accessories

Repair Kit

Repair Kit, a proprietary epoxy putty filler, can help



SealFix[™] 103



ArmorFix[™] 108

All Jonite products are impregnated with a coat of



Kleansol™ 511

might be badly soiled due to mishandling or accidents.



Lifting Hooks



Loading Specification

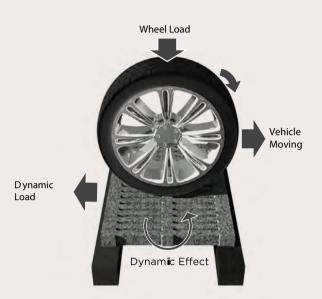
Compliant with BS EN 124:2015

Understanding Loads Affecting Grates:

Static Loads refers to load applied vertically to the grating with no other movement, such as a load from a stationary vehicle.

Wheel-loads refer to the weight of the vehicle and its typical load depending on the type of the wheels. Pneumatic tyres spread the load like the test-block in the illustration and solid tyres post a greater point load.

Vehicle movement, speed, braking and traffic frequency are the consolidated consideration of dynamic loads.



Selection Of Appropriate Load Class According To BS EN 124:2015



GROUP 01

CLASS A15





Areas strictly for pedestrians and pedal cyclists. House drains, pool decks, courtyards, park- walkways and pedestrian compounds within precincts.



Public footways and comparable areas, car porches and parks. Generally for slowmoving vehicles not exceeding 3 tonnes in wheel-load.



GROUP 03 CLASS C250

Used as curb-side grates in heavy vehicle parking areas and entrances of small precincts. Generally for slow-moving vehicles not exceeding 5.5 tonnes in wheel-load.



GROUP 04 CLASS D400

Carriageways of roads, hard-standing areas for fire-engine access and parking areas for heavy vehicles. Generally for slow-moving vehicles not exceeding 11.5 tonnes in wheel-load.

06

INSTALLATION GUIDES

 \rightarrow

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| Banco™ | 136 |
| Pool Grates | 146 |
| Sump Covers | 149 |
| | |

Trench Grates

Installation

Jonite trench grates can be installed in a wide variety of ways as they can vary worldwide. For trench grates, this mainly depends if you are introducing light-duty(pedestrian-rated) grates or heavy-duty (vehicular-rated) grates.

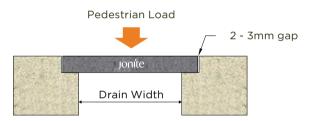
For light-duty applications, adopt Methods 1 and 2 by installing directly on a level concrete or L-steel angles for added support and flatness.

For heavy-duty applications, adopt Methods 3 and 4 by installing using Jonite L-Trimmers or with an inverted L-steel angle.

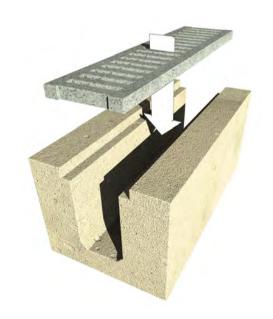
1

LIGHT-DUTY GRATES ON LEVEL CONCRETE

Only light-duty Jonite trench grates, which are strictly for pedestrian application (6KN-15KN), can be installed directly on level concrete as long as they are installed flatly with no visible rocking.



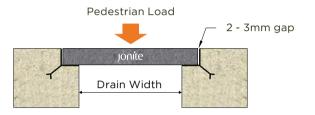
Install directly on flat & level concrete drains and tiles.





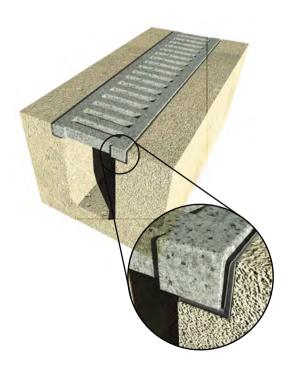
LIGHT-DUTY GRATES WITH L-STEEL ANGLES

For specific applications, especially with custom curve grates, it might be easier for installers to use L-Steel angles to ensure level flatness. These are still strictly for pedestrian applications only.



Install with L-steel angles and fishtails.



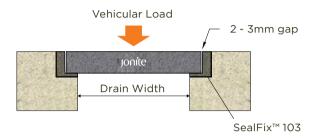


L-steel angles ease the leveling process during installation.

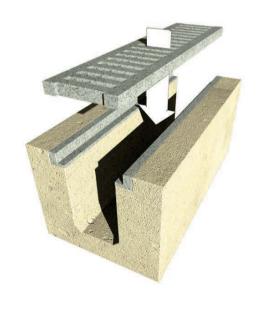
INSTALLATIONS

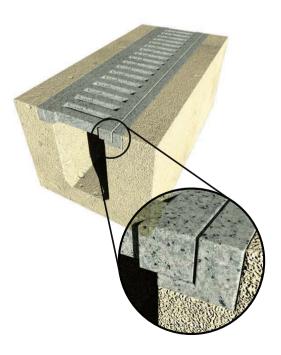
HEAVY-DUTY GRATES WITH JONITE L-TRIMMERS™

Trench grates for vehicular application (125KN - 400KN), must be flatly installed on a 90-degree edge to ensure maximum performance. Jonite L-Trimmers™ provides this with a bonus of aesthetic flair.



Jonite L-Trimmers[™] is installed using dry fixing with SealFix™ 103 (epoxy mortar).

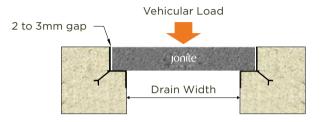




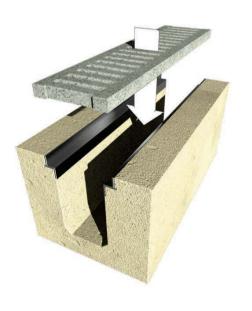
Jonite L-Trimmers[™] provides a clean and aesthetically appealing installation.

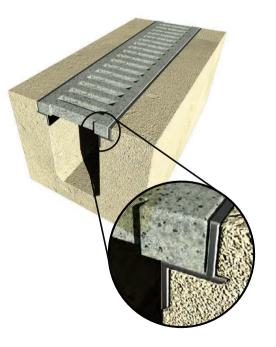
HEAVY-DUTY GRATES WITH INVERTED L-STEEL **ANGLES**

For a more cost-effective alternative, heavy-duty trench grates can be installed on a flat surface with a 90-degree edge by inverting an L-steel angle and welding a flat bar to the side.



An inverted or a fabricated L-steel angle allows a 90-degree edge seating, which prevents cracks caused by point loading.

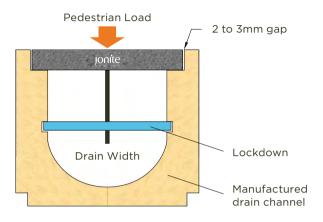




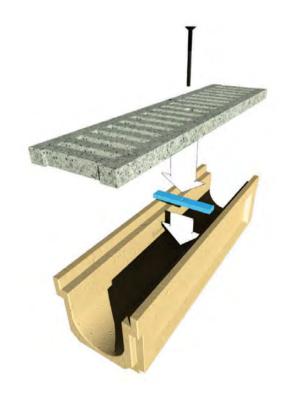
A 90-degree seating edge can be obtained in a variety of ways using L-steel angles.

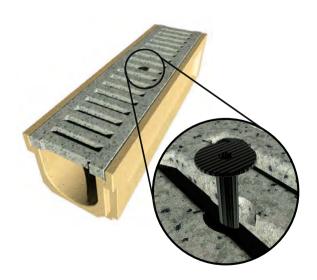
GRATES WITH COMPATIBLE DRAIN CHANNELS

Selected Jonite trench grate models are designed to fit perfectly into specifically manufactured drain channels. Custom options can also be available upon request.

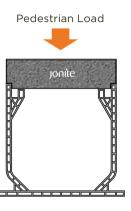


Install directly on the compatible drain channels. Some models can be bolted down with lockdown features.



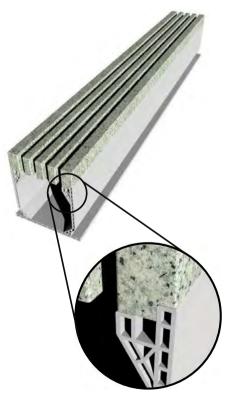


After placing the lockdown plate, a countersunk bolt is then bolted in to secure.



Jonite Mini Grate[™] being installed on compatible channels. Grates come with recessed grooves for a snug snap and fit.





Jonite Mini Grate™ is specially cut to fit snugly onto the channels, providing a clean and edgeless aesthetic.

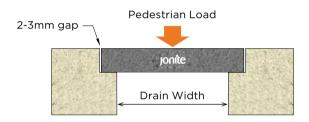
Curve Grates

Installation

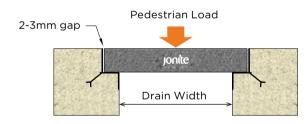
All Jonite curve grates can be customized into any radius requested. However, there are three recommended methods, usually depending on the application and installation of the straight standard grates.

Jonite can either provide the Curve Templates™ for installers to check and guide the radius of the formwork or provide a full-scale CAD drawing of the template.

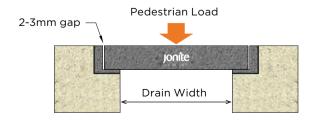
ON LEVEL CONCRETE



WITH L-STEEL ANGLES

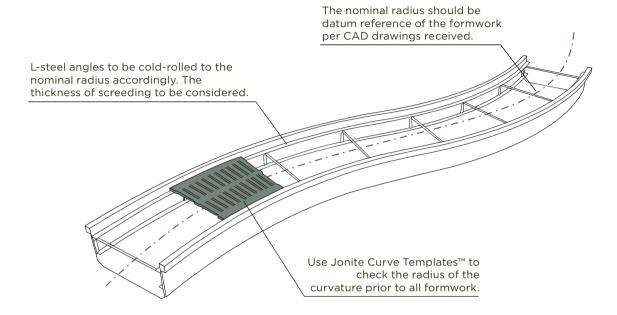


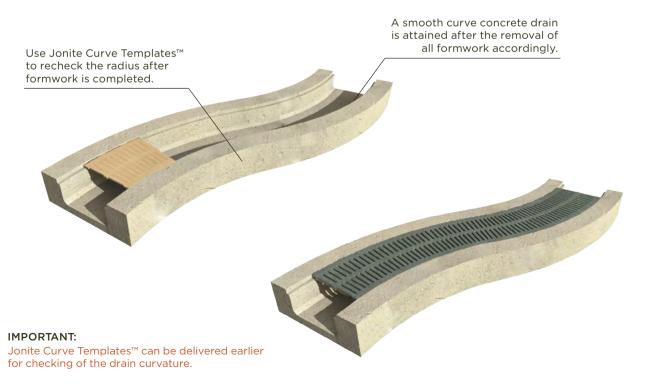
WITH JONITE L-TRIMMERS™



ON LEVEL CONCRETE

This method uses L-steel angles cold-rolled to the required radii with considerations such as screeding, the thickness of form-ply, and allowance of the internal drains.

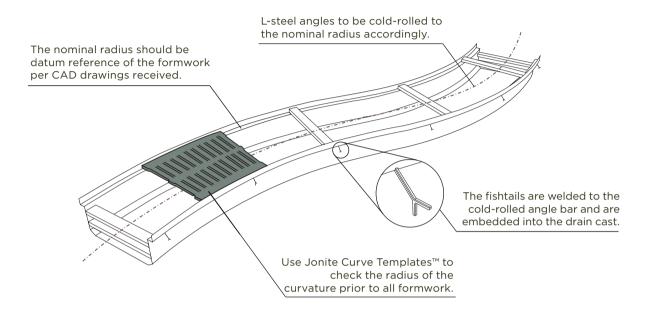




2

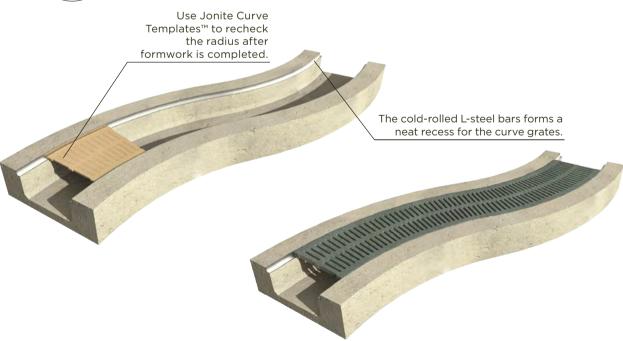
WITH L-STEEL ANGLES

This method uses L-steel angles to be cold-rolled to the nominal radii accordingly. The entire metal frame in curvature will be positioned and mounted firmly over the timber formwork. This formwork must also be in line with the curve of the metal framework accordingly.





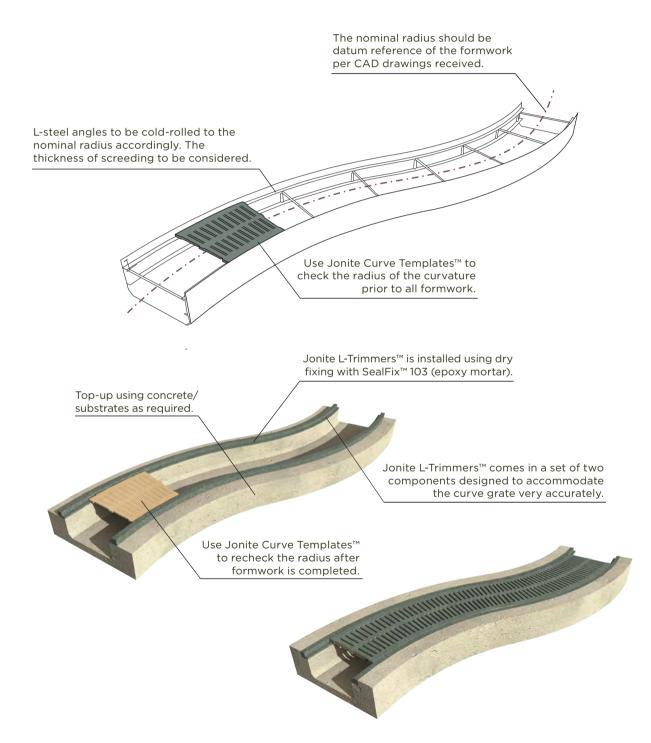
IMPORTANT: A 90-degree edge seating as shown must be ensured for vehicular application.



WITH JONITE L-TRIMMERS™

This method uses Jonite L-Trimmers™ as the shoulder seating for the curve grates. This method can be used for any application. The curve L-Trimmers come in a set of two sections, the inner and the outer curvature. They are accurately produced to the nominal radius accordingly.

The vertical curve drain is cast similarly to the level concrete without the recessed shoulder seating provision. The curve drains will then be installed with the L-Trimmers using dry fixing with SealFix $^{\text{TM}}$ 103 (epoxy mortar).



GRATE TILES

Grate Tiles™

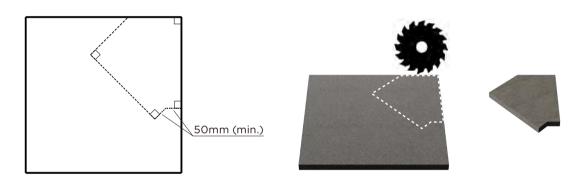
Installation

Jonite Grate Tiles™ are standard non-perforated solid slabs that have the same material composition and colour as Jonite grates. They are mainly used when a drain encounters an irregular joint or to fill an odd end of a drain.

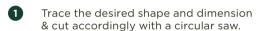
Light-duty(pedestrian-rated) models can be cut on-site by the installer, as shown below. Heavy-duty(vehicular-rated) models must be factory fabricated according to templates or full-scale CAD drawings provided by the installer.

LIGHT-DUTY GRATE TILES™

Light-Duty Grate Tiles™ are not reinforced and can be easily cut on-site with a circular saw. The shape and dimension required can be easily traced and cut on the Grate Tile™ as desired. It is important to note that the minimum length of the Grate Tile™ being supported must be at least 50mm.



IMPORTANT: Supported length of the Grate Tile™ must be at least 50mm

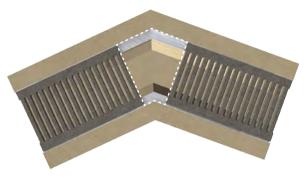


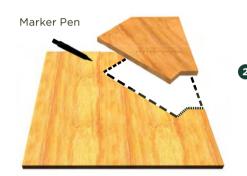


HEAVY-DUTY GRATE TILES™

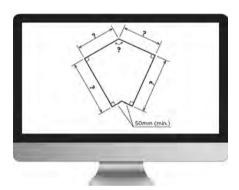
Heavy-Duty Grate Tiles™ cannot be cut on-site due to their thick heavy reinforcements within. The shape and dimension required must be accurately traced onto a piece of cardboard or plywood. Alternatively, the installer can determine them onto a full-scale CAD drawing. The shape and reinforcements of the Grate Tiles™ will then be fabricated according to the templates or drawings provided.

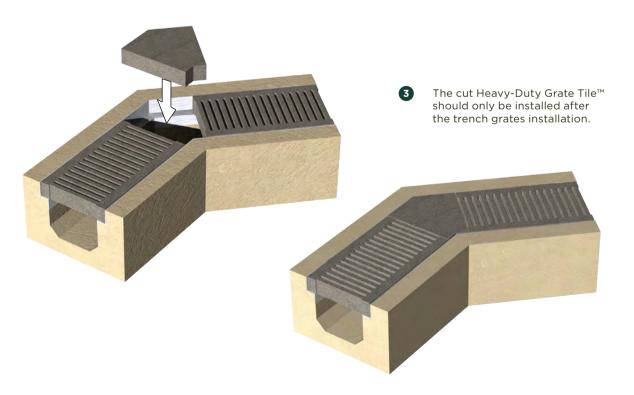






Send cut templates or drawings to Jonite for fabrication.





Tree Grate

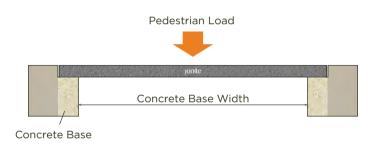
Installation

For most tree grates to perform optimally, sufficient rooting space must be provided for the tree. The amount of rooting space almost entirely depends on the species of tree, which would determine the height of the concrete base supporting the tree grate.

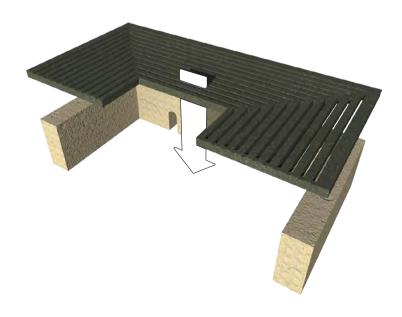
For larger tree grates, a support frame is critical to ensure the tensile strength required. Drawings of support frames can be provided should the frames be fabricated locally.

SMALL TREE GRATES

For small Jonite tree grates, which consist of two panels or less, the tree grates can be supported on the level concrete base directly.



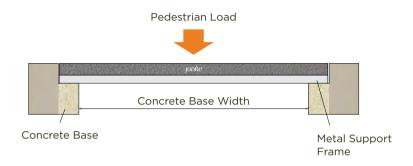
Install directly on level concrete base.



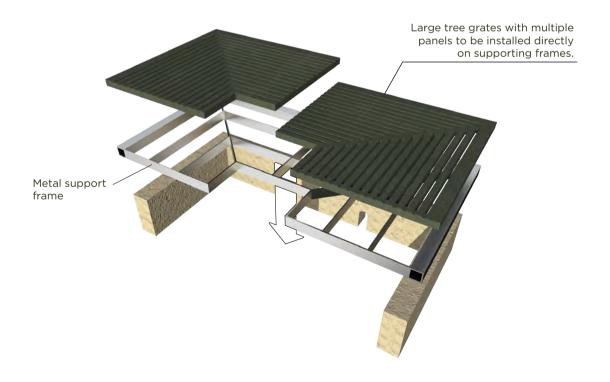
LARGE TREE GRATES

Large Jonite tree grates are usually more than 1200mm in total length and consist of more than two panels, thus requiring the need for a supporting frame.

The tree grates must be flatly resting across the supporting frame, which must be securely bolted together.



The metal supporting frames will be rested directly on a concrete base.

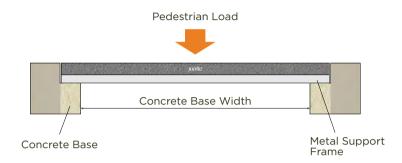


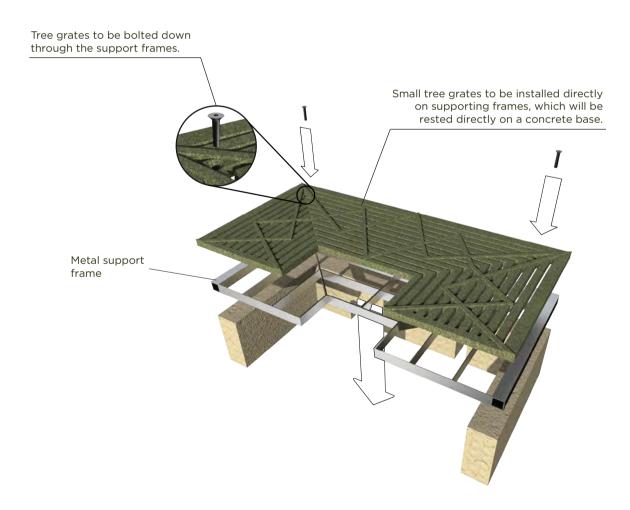
Ensure that the tree grates are installed flat and level for optimal performance.

3

SMALL TREE GRATES WITH LOCKDOWNS

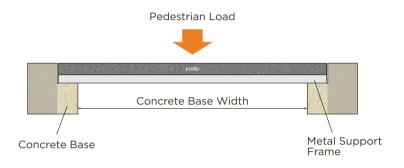
For small Jonite tree grates with lockdowns, they must be installed with a frame so that the tightening bolts can be securely fastened through the frames.



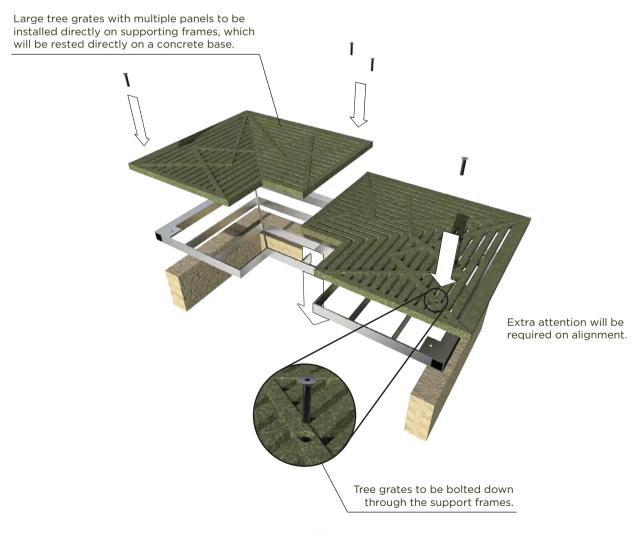


LARGE TREE GRATES WITH LOCKDOWNS

As the supporting frames may arrive in sizable multiple panels, it is crucial for the larger Jonite tree grates with lockdowns to be aligned with the support frames before securely fastening the bolts. Once secured and aligned, always check to ensure if the tree grate panels are flatly resting on the frames, especially across the perimeter.



Always ensure the multiple panels are flat, level and aligned before locking down.



Banco™

Installation

The BANCO street benches come in two models, the BR (with backrests) and SS (without backrests). Like most street benches, the BANCO models are designed to be installed outdoors permanently. It is essential that the site is well prepared prior to any bench installation.

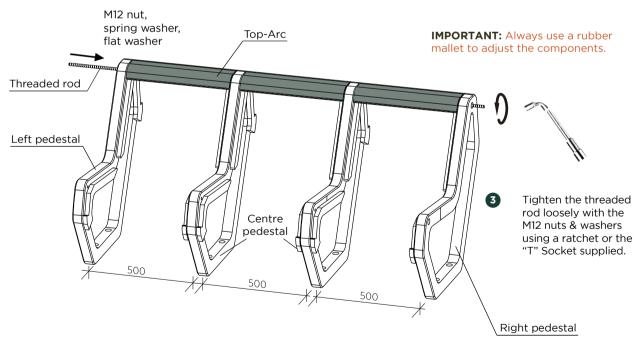
Preparation

- Unpack all the components and arrange them accordingly, as shown in illustrations below.
- 2 Prepare all necessary tools in advance.

1

BENCH PEDESTALS & TOP-ARC PLACEMENT

Assemble all the bench pedestals with Top-Arc first, followed by Lower-Arc, and the Centre-Arc.

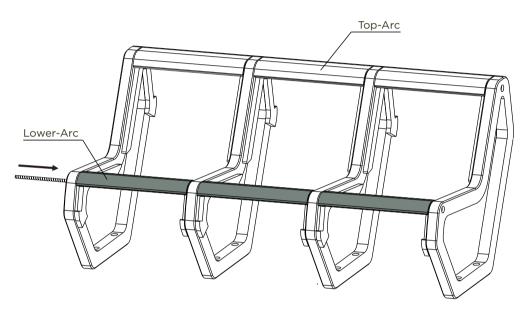


Place the left pedestal and centre pedestal upright about 500mm away from each other. Hold the pedestals with the Top-Arc and pull through the threaded rod slowly.

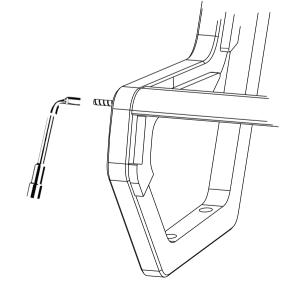
2

LOWER-ARC PLACEMENT

4 Place the Lower-Arc in position and pull through the next threaded rod as previously done on the Top-Arc.



Tighten the threaded rods loosely with the M12 nuts, spring washers, and flat washers to square up the entire skeleton unit as required.

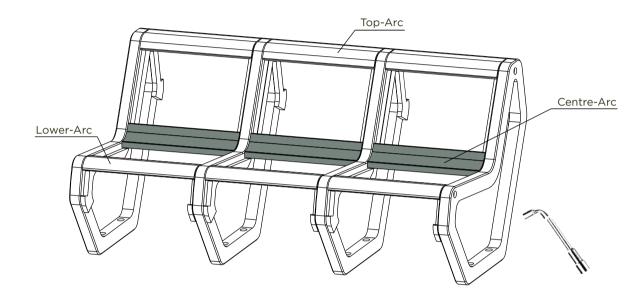


BANCO™

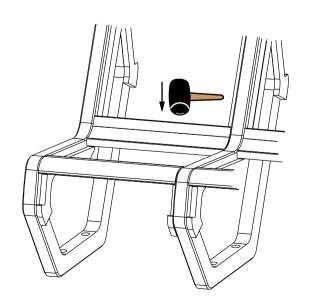
3

CENTRE-ARC PLACEMENT & POSITIONING

6 Place all the Centre-Arc components in position over the placed pedestals.



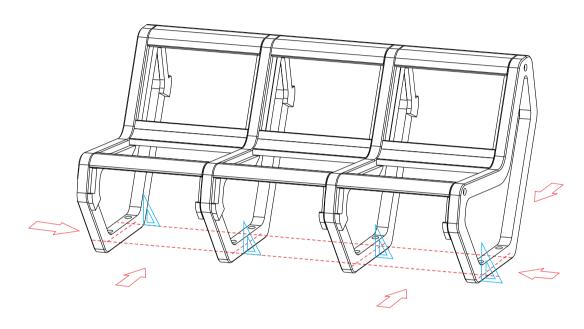
Once their alignment is fixed, tighten the threaded rods to square-up the entire skeleton unit. Doing this determines the floor mounting position.



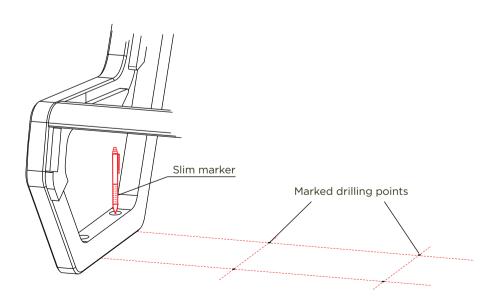
IMPORTANT: Always use the rubber mallet to reposition the components before tightening.

DRILL-POINT MARKING

8 Carry the skeleton unit by slowly sliding it to the required position. Do not lift the skeleton unit high as that may damage the components.



IMPORTANT: Use a set square or a try square to check the perpendicularity of all the pedestals.

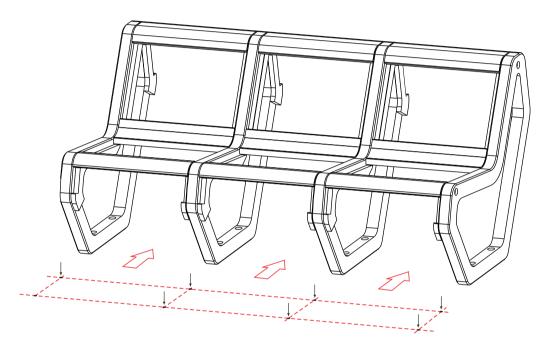


Once the skeleton unit is in position, tighten all the threaded rods. Use a slim marker to mark out the drilling points as required.

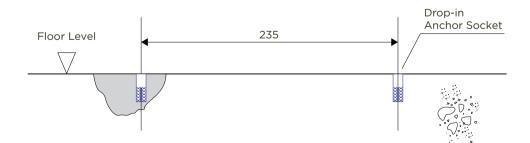
BANCOTM

DRILLING ON DRILL POINTS

Shift the skeleton away from the drilling points so that it does not get in the way.

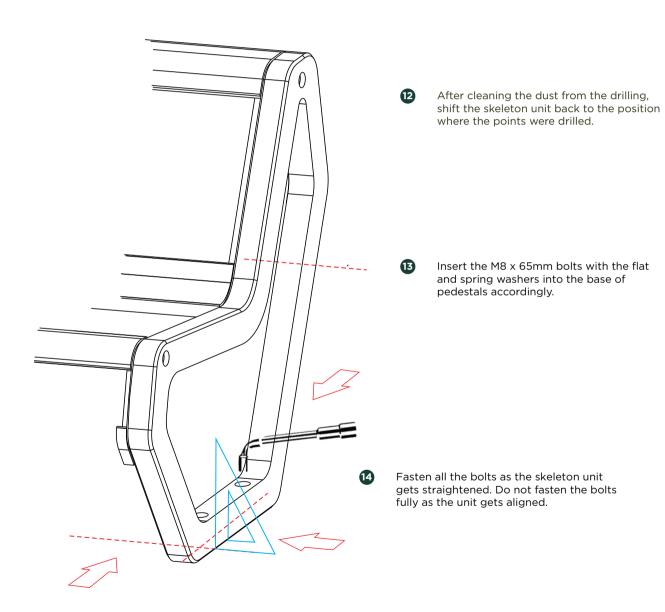


Set the concrete hand-drill with the right drilling bit for an M8 socket and proceed to drill the drill-points with the depth not exceeding 30mm (length of M8 socket).



IMPORTANT: Should there be a mistake in drilling, enlarge the hole and fill it with SealFix[™] provided. Then place the drop-in anchor socket in the right position. The curing time is 24 hours.

TIGHTENING BOLTS

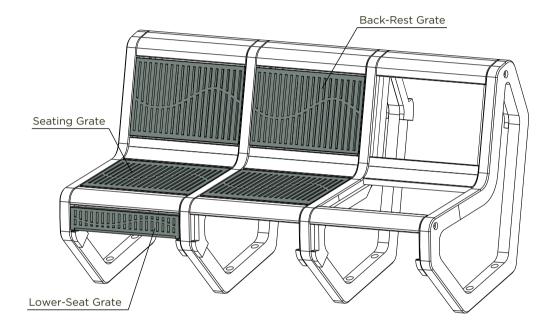


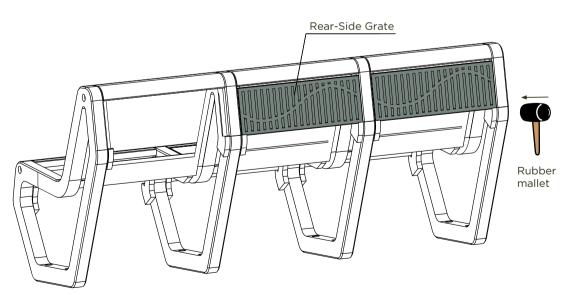
7

GRATES ALIGNMENT

Place all the grates into position accordingly. Adjust the entire bench by tightening and loosening the threaded rods, M12 nuts, and the anchoring bolts for squaring.

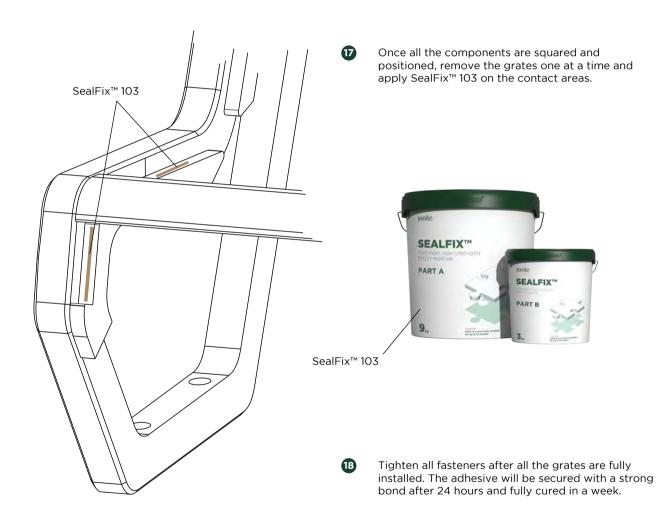
IMPORTANT: Do not apply the SealFix[™] yet.





Check that all the components are properly aligned by tapping them with the rubber mallet constantly.

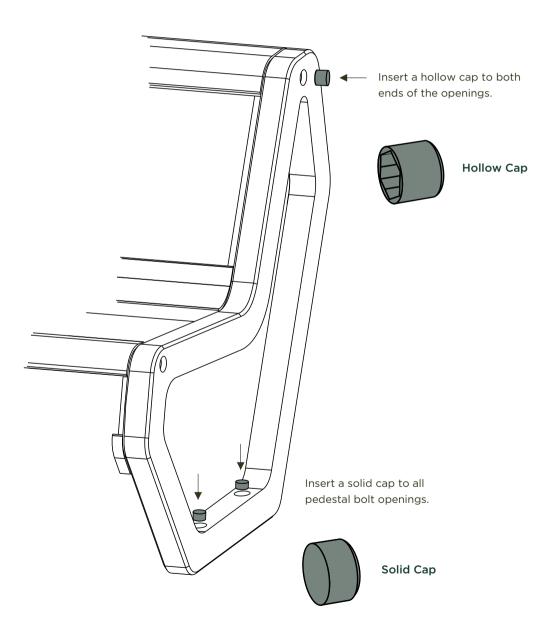
GRATES INSTALLATION



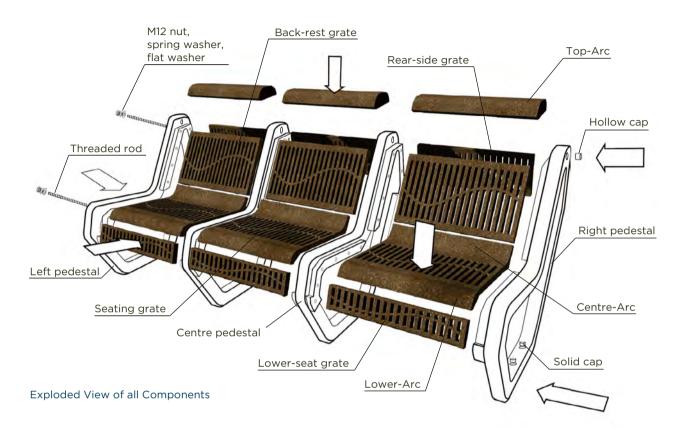
BANCO™

INSERTING CAPS

Insert the caps to the respective bolt and fastening holes. Slight grinding may be required for caps to flush. Use SealFix™ to seal up.



COMPLETION OF BANCO INSTALLATION





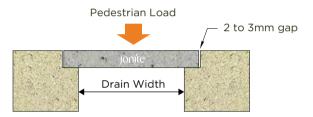
INSTALLATIONS

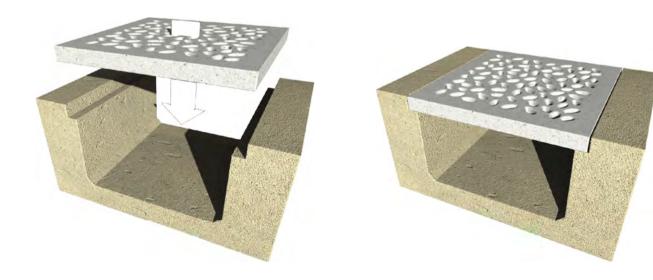
Pool Grates

Installation

Jonite pool grates are installed very similar to how light-duty trench grates are installed, only directly on level concrete, or on trimmers for added aesthetics and flatness. It is important to note that, however, although they are very similar, the condition of the site must be kept pristine to prevent any potential injuries for bare feet.

LIGHT-DUTY POOL GRATES ON LEVEL CONCRETE Jonite pool grates, which are strictly for pedestrian application (6KN), can be installed directly on level concrete as long as they are installed flatly with no visible rocking.

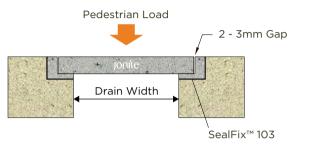




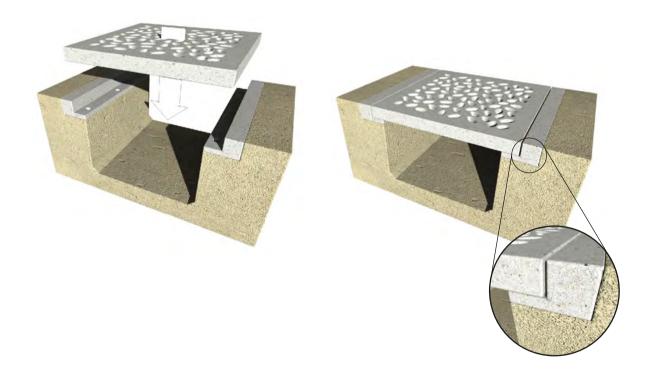
Install directly on flat and level concrete drains and tiles.

POOL GRATES WITH JONITE L-TRIMMERS™

Pool grates can be installed with Jonite L-Trimmers™ to provide a boost in aesthetics as well as to help level the support for the grates, which is highly essential in a pool environment.



Jonite L-Trimmers[™] is installed using dry fixing with SealFix[™] 103 (epoxy mortar).

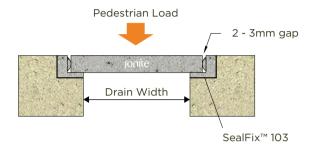


Jonite L-Trimmers $^{\text{\tiny TM}}$ provides a clean and aesthetically appealing installation.

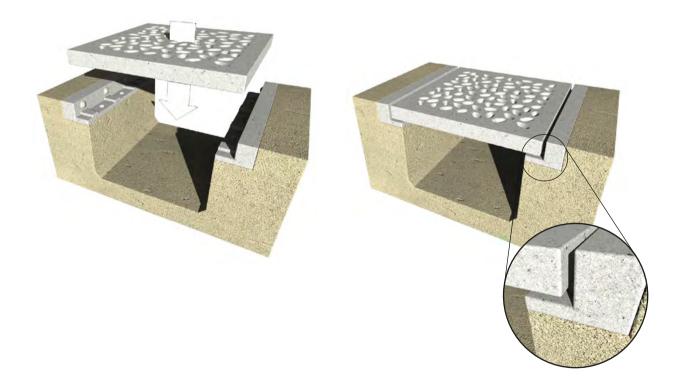
Z

POOL GRATES WITH JONITE STUD TRIMMERS™

Pools that require more water drainage to prevent splash can use Stud Trimmers $^{\text{TM}}$ with the pool grates to help improve the flow rates of the perimeter drains.



Jonite Stud Trimmers™ is installed using dry fixing with SealFix™ 103 (epoxy mortar).



Studs on the trimmers provide increased perforation for improved flow rates.

Sump Covers

Installation

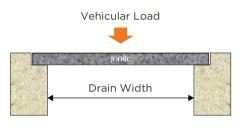
Sump covers all over the world are installed very differently. The methods in which Jonite sump covers are installed are highly dependent on the application and the size of the sump.

Sump covers for a vehicular use would require a higher level of support like L-steel angles or Jonite Trimmer Frame $^{\text{TM}}$.

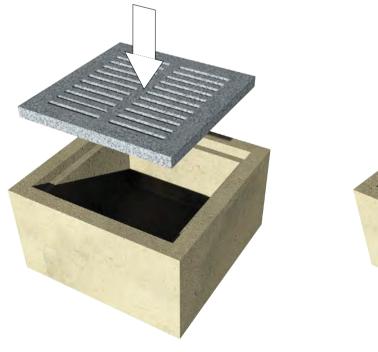
For a large custom sump, the multiple panels can also be supported by a frame using L-steel angles or a custom Jonite Trimmer Frame $^{\text{TM}}$.

SMALL SUMP COVERS ON LEVEL CONCRETE

Only light-duty Jonite sump covers, which are strictly for pedestrian application (6KN-15KN), can be installed directly on level concrete as long as they are installed flatly with no visible rocking across all four sides of the support.



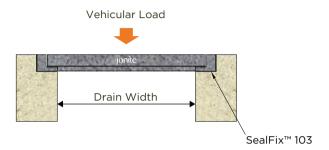
Install directly on level concrete sump.



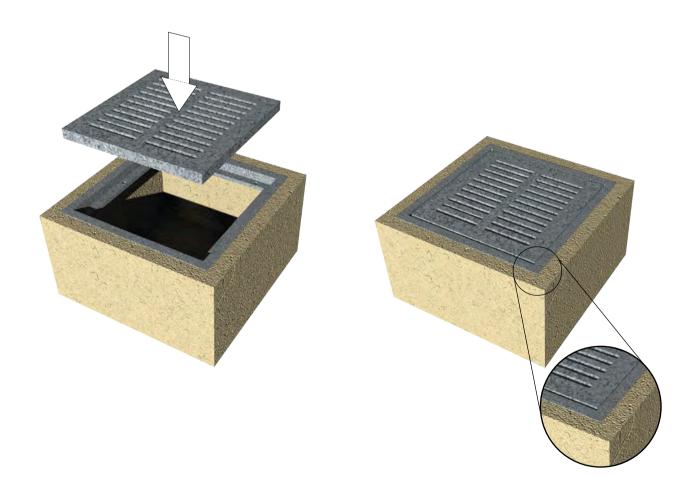


SMALL SUMP COVERS WITH JONITE TRIMMER FRAME™

Sump covers for vehicular application (125KN - 400KN), must be flatly installed on a 90-degree edge to ensure maximum performance. Jonite Trimmer Frame™ provides this with a bonus of aesthetic flair.



Jonite Trimmer Frame™ is installed using dry fixing with SealFix[™] 103 (Epoxy mortar).

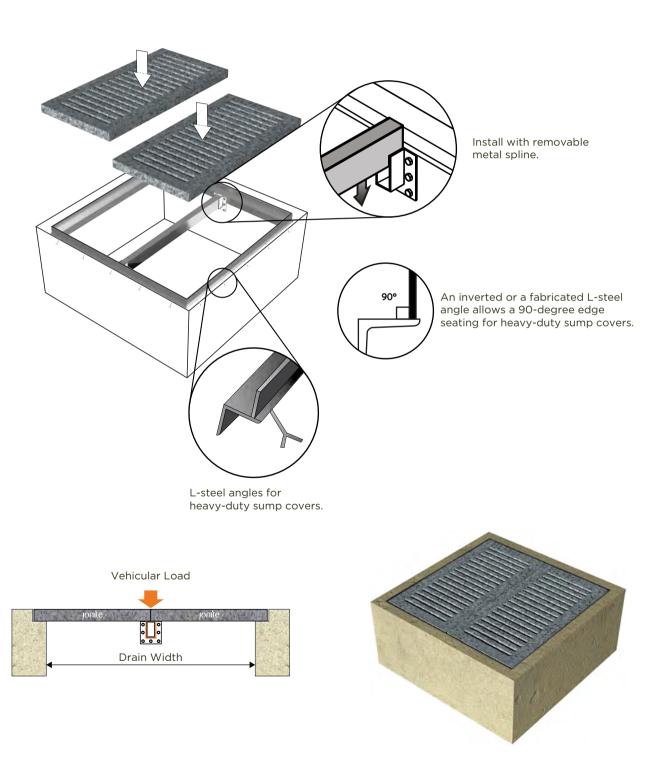


Jonite Trimmer Frame™ provides a clean and aesthetically appealing installation.

LARGE SUMP COVERS **WITH L-STEEL ANGLES**

For all large sump covers with multiple panels, a metal support frame is usually required. For sump covers requiring maintenance accessibility, a removable metal spline can be designed and fabricated.

For heavy-duty sump covers, they can be installed on a flat surface with a 90-degree edge by inverting an L-steel angle and welding a flat bar to the side. This is usually required on all four sides of the sump cover, creating a frame.

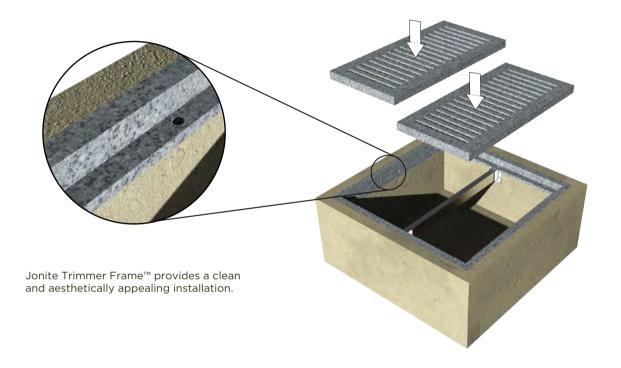


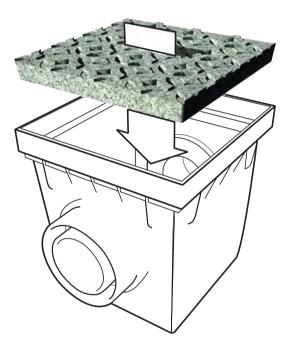
LARGE SUMP COVERS WITH JONITE TRIMMER FRAME™

Large sump covers with multiple panels can also use a Jonite Trimmer Frame™ as an alternative to the L-steel metal frame support. The Trimmer Frame™ provides the same 90-degree edge flat surface as the L-steel metal frame with an aesthetic

BASIN GRATES

Jonite basin grates are similar to sump covers functionally as a grate for a point drainage system. The main difference, however, is that the basin grates are specially designed to fit a specific model of a manufactured catch basin.

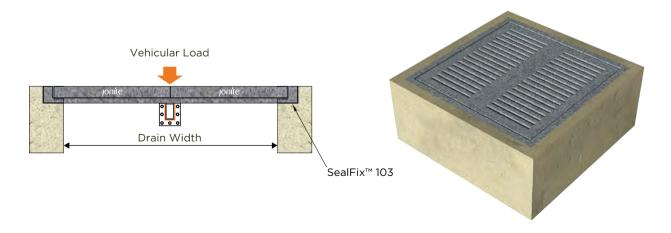


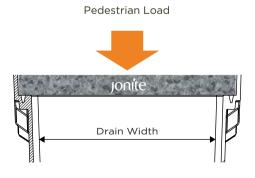




Install directly on the compatible catch basins

Basin grates are perfectly shaped to fit most catch basins.





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