

AURAM EQUIPMENT

AURAM BLOCKS DATA

The frame of the Auram press 3000 can presently fit 17 moulds to produce about 75 different [Compressed Stabilised Earth Blocks](#).



These series are available:

- Plain square blocks
- Plain rectangular blocks
- Round blocks
- Hollow square blocks
- Hollow rectangular blocks
- Hollow square interlocking blocks
- Hollow rectangular interlocking blocks
- Plain square interlocking blocks
- Plain rectangular interlocking blocks
- Various special blocks

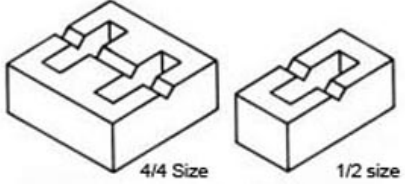
Notes for data mentioned in the following tables:

- The Practical daily productivity is with 7 people in the block yard: 3 people for mixing, 1 operator, 2 people on the lever and 1 man stacking for the initial curing.
- The quantities of materials are calculated with 5 % cement for a soil/sand mix which has a ratio of 80% soil and 20 % sand.

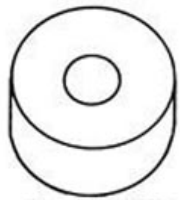
BLOCK PLAIN 240																						
	Use	Details																				
<p style="text-align: center;">Plain block 240 240 x 240 x 90 mm</p>	<p>This block is used for building plain load bearing walls of 24 cm thick. It can be used up to 4 floors high. It presents the advantage of saving mortar and allowing a fast block laying.</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">Quantities of materials per 1000 Blocks</th> </tr> </thead> <tbody> <tr> <td style="text-align: right;">Soil:</td> <td style="text-align: left;">7.70 (m³)</td> </tr> <tr> <td style="text-align: right;">Sand:</td> <td style="text-align: left;">1.90 (m³)</td> </tr> <tr> <td style="text-align: right;">Cement:</td> <td style="text-align: left;">12.82 (bag)</td> </tr> <tr> <td colspan="2">Full block size (L x W x H, in mm) = 240 x 240 x 90</td> </tr> <tr> <td colspan="2">Net volume of material = 5.184 Litres</td> </tr> <tr> <td colspan="2">Gross volume of block = 5.184 Litres</td> </tr> <tr> <td colspan="2">Bearing area = 576 cm²</td> </tr> <tr> <td colspan="2">Practical daily productivity for the full size block = 850 Nos.</td> </tr> <tr> <td colspan="2">Number of blocks per bag = 78</td> </tr> </tbody> </table>	Quantities of materials per 1000 Blocks		Soil:	7.70 (m ³)	Sand:	1.90 (m ³)	Cement:	12.82 (bag)	Full block size (L x W x H, in mm) = 240 x 240 x 90		Net volume of material = 5.184 Litres		Gross volume of block = 5.184 Litres		Bearing area = 576 cm ²		Practical daily productivity for the full size block = 850 Nos.		Number of blocks per bag = 78	
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SPECIAL BLOCKS 240																						
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<p style="text-align: center;">Special blocks 240 Nominal size = 240 x 240 x 90 mm</p>	<p>These blocks are used for various works with the plain block 240. These blocks are produced in the mould plain 240.</p> <p>U shaped blocks are used for precasting the composite lintels and beams, as well as casting plinth and ring beams</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">Quantities of materials per 1000 Blocks</th> </tr> </thead> <tbody> <tr> <td style="text-align: right;">Soil:</td> <td style="text-align: left;"><i>Varies with the block</i></td> </tr> <tr> <td style="text-align: right;">Sand:</td> <td style="text-align: left;"><i>Varies with the block</i></td> </tr> <tr> <td style="text-align: right;">Cement:</td> <td style="text-align: left;"><i>Varies with the block</i></td> </tr> <tr> <td colspan="2">Nominal block sizes (L x W x H, in mm) = 240 x 240 x 90</td> </tr> <tr> <td colspan="2">Net volume of material = <i>Varies with the block</i></td> </tr> <tr> <td colspan="2">Gross volume of block = <i>Varies with the block</i></td> </tr> <tr> <td colspan="2">Bearing area = <i>Not relevant</i></td> </tr> <tr> <td colspan="2">Practical daily productivity for the full size block = <i>Varies with the block</i></td> </tr> <tr> <td colspan="2">Number of blocks per bag = <i>Varies with the block</i></td> </tr> </tbody> </table>	Quantities of materials per 1000 Blocks		Soil:	<i>Varies with the block</i>	Sand:	<i>Varies with the block</i>	Cement:	<i>Varies with the block</i>	Nominal block sizes (L x W x H, in mm) = 240 x 240 x 90		Net volume of material = <i>Varies with the block</i>		Gross volume of block = <i>Varies with the block</i>		Bearing area = <i>Not relevant</i>		Practical daily productivity for the full size block = <i>Varies with the block</i>		Number of blocks per bag = <i>Varies with the block</i>	
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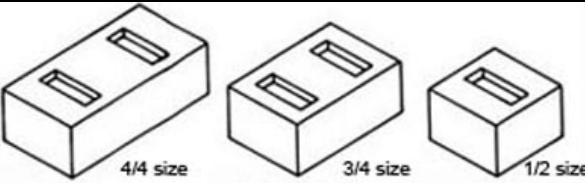
BLOCK HOLLOW 240

 <p>4/4 Size 1/2 size Hollow block 240 240 x 240 x 90 mm</p>	<p>Use</p> <p>This block can be used for light load bearing structures up to 2 floors.</p> <p>It presents the advantage of saving materials and providing a better heat insulation.</p>	<p>Details</p> <p>Full block size (L x W x H, in mm) = 240 x 240 x 90 Net volume of material = 3.969 Litres Gross volume of block = 5.184 Litres Bearing area = 451 cm² Void = 21.6 % Practical daily productivity for the full size block = 600 Nos. Number of blocks per bag = 107</p>	<p>Quantities of materials per 1000 Blocks</p> <p>Soil: 5.60 (m³) Sand: 1.40 (m³) Cement: 9.34 (bag)</p>
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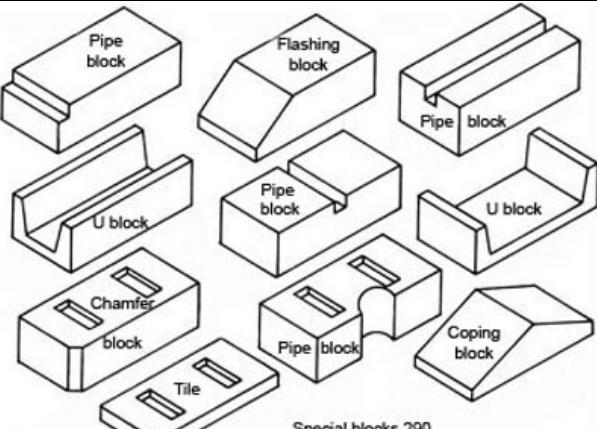
BLOCK ROUND 240

 <p>Round block 240 - 240 dia x 90 mm -</p>	<p>Use</p> <p>This block is used for building composite columns (Reinforced cement concrete in the middle hole).</p> <p>It presents the advantage of saving reinforced cement concrete.</p>	<p>Details</p> <p>Block size = Ø 240 - Ø 88 x 90 mm Net volume of material = 3.524 Litres Gross volume of block = 4.071 Litres Bearing area = 391 cm² Void = 14 % Practical daily productivity for the full size block = 750 Nos. Number of blocks per bag = 119</p>	<p>Quantities of materials per 1000 Blocks</p> <p>Soil: 5.04 (m³) Sand: 1.26 (m³) Cement: 8.40 (bag)</p>
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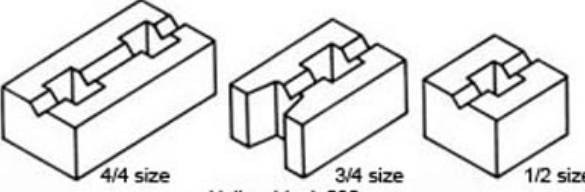
BLOCK PLAIN 290

 <p>4/4 size 3/4 size 1/2 size Plain block 290 290 x 140 x 90 mm</p>	<p>Use</p> <p>This block is used as a single block width for light load bearing structures, or as a double block width for heavy load bearing structures. It presents the advantage of saving mortar and allowing a fast block laying.</p>	<p>Details</p> <p>Full block size (L x W x H, in mm) = 290 x 140 x 90 Net volume of material = 3.654 Litres Gross volume of block = 3.654 Litres Bearing area = 406 cm² Void = <i>Not relevant</i> Practical daily productivity for the full size block = 850 Nos. Number of blocks per bag = 116</p>	<p>Quantities of materials per 1000 Blocks</p> <p>Soil: 5.17 (m³) Sand: 1.29 (m³) Cement: 8.62 (bag)</p>
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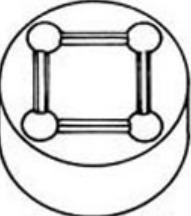
SPECIAL BLOCKS 290

 <p>Special blocks 290 Nominal size = 290 x 140 x 90 mm</p>	<p>Use</p> <p>These blocks are used for various works with the plain block 290. These blocks are produced in the mould plain 290.</p> <p>U shaped blocks are used for precasting the composite lintels and beams, as well as casting plinth and ring beams</p>	<p>Details</p> <p>Nominal block sizes (L x W x H, in mm) = 290 x 140 x 90 mm Net volume of material = <i>Varies with the block</i> Gross volume of block = <i>Varies with the block</i> Bearing area = <i>Not relevant</i> Void = <i>Not relevant</i> Practical daily productivity for the full size block = <i>Varies with the block</i> Number of blocks per bag = <i>Varies with the block</i></p>	<p>Quantities of materials per 1000 Blocks</p> <p>Soil: <i>Varies with the block</i> Sand: <i>Varies with the block</i> Cement: <i>Varies with the block</i></p>
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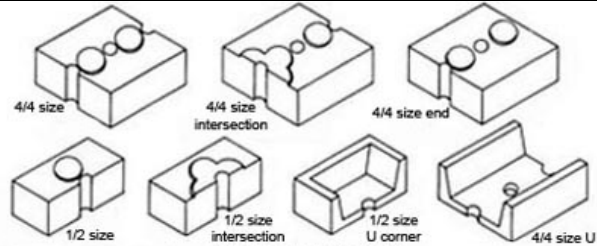
BLOCK HOLLOW 290

 <p>4/4 size 3/4 size 1/2 size Hollow block 290 290 x 140 x 90 mm</p>	<p>Use</p> <p>This block can be used for light load bearing structures up to 2 floors.</p> <p>It presents the advantage of saving materials and providing better heat insulation.</p>	<p>Details</p> <p>Full block size (L x W x H, in mm) = 290 x 140 x 90 Net volume of material = 2.846 Litres Gross volume of block = 3.654 Litres Bearing area = 326 cm² Void = 19.5 % Practical daily productivity for the full size block = 600 Nos. Number of blocks per bag = 156</p>	<p>Quantities of materials per 1000 Blocks</p> <p>Soil: 3.84 (m³) Sand: 0.96 (m³) Cement: 6.40 (bag)</p>
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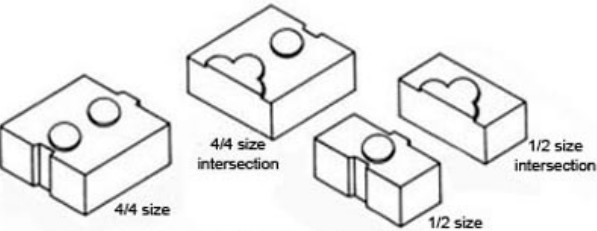
BLOCK ROUND 290

 <p>Round block 290 290 dia x 90 mm</p>	<p>Use</p> <p>This block is used for building composite columns (Reinforced cement concrete in the 4 holes).</p> <p>It presents the advantage of saving reinforced cement concrete.</p>	<p>Details</p> <p>Block size = Ø 290 x 90 mm Net volume of material = 5.413 Litres Gross volume of block = 5.940 Litres Bearing area = 660 cm² Void = 7.6 % Practical daily productivity for the full size block = 750 Nos. Number of blocks per bag = 79</p>	<p>Quantities of materials per 1000 Blocks</p> <p>Soil: 7.60 (m³) Sand: 1.90 (m³) Cement: 12.66 (bag)</p>
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BLOCK HOLLOW INTERLOCKING 245

 <p>4/4 size 4/4 size intersection 4/4 size end 1/2 size 1/2 size intersection 1/2 size U corner 4/4 size U Hollow interlocking block 245 245 x 245 x 95 mm</p>	<p>Use</p> <p>These blocks are used for building disaster resistant constructions, as it has provisions for vertical and horizontal reinforcing elements.</p> <p>They can be used up to 2 floors high in seismic zones 3, 4, and 5 (Indian zones).</p>	<p>Details</p> <p>Full block size (L x W x H, in mm) = 245 x 245 x 95 Net volume of material = 5.439 Litres Gross volume of block = 5.702 Litres Bearing area = 556 cm² Void = 8 % Practical daily productivity for the full size block = 500 Nos. Number of blocks per bag = 78</p>	<p>Quantities of materials per 1000 Blocks</p> <p>Soil: 7.63 (m³) Sand: 1.90 (m³) Cement: 12.71 (bag)</p>
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BLOCK PLAIN INTERLOCKING 245

 <p>4/4 size 4/4 size intersection 1/2 size intersection Plain interlocking block 245 245 x 245 x 95 mm</p>	<p>Use</p> <p>These blocks can be used by semiskilled labour.</p> <p>These blocks cannot be used for building disaster resistant constructions, as it has no provisions for reinforcing elements.</p> <p>They can be used up to 2 floors high.</p>	<p>Details</p> <p>Full block size (L x W x H, in mm) = 245 x 245 x 95 Net volume of material = 5.702 Litres Gross volume of block = 5.702 Litres Bearing area = 600 cm² Void = <i>Not relevant</i> Practical daily productivity for the full size block = 500 Nos. Number of blocks per bag = 74</p>	<p>Quantities of materials per 1000 Blocks</p> <p>Soil: 8.06 (m³) Sand: 2.00 (m³) Cement: 13.43 (bag)</p>
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BLOCK HOLLOW INTERLOCKING 295

	Use	Details	Quantities of materials per 1000 Blocks
	<p>These blocks are used for building disaster resistant constructions, as it has provisions for vertical and horizontal reinforcing elements.</p> <p>They can be used only for ground floor structures in seismic zones 3 and 4 (Indian zones).</p>	Full block size (L x W x H, in mm) = 295 x 145 x 95	Soil: 5.48 (m ³)
		Net volume of material = 3.800 Litres	Sand: 1.37 (m ³)
		Gross volume of block = 4.063 Litres	Cement: 9.14 (bag)
		Bearing area = 384 cm ²	
		Void = 9.3 %	
Practical daily productivity for the full size block = 500 Nos.			
Number of blocks per bag = 109			

BLOCK PLAIN INTERLOCKING 295

	Use	Details	Quantities of materials per 1000 Blocks
	<p>These blocks can be used by semiskilled labour. They can be used for ground floors only.</p> <p>They cannot be used for building disaster resistant constructions, as it has no provisions for reinforcing elements.</p>	Full block size (L x W x H, in mm) = 295 x 145 x 95	Soil: 5.87 (m ³)
		Net volume of material = 4.063 Litres	Sand: 1.47 (m ³)
		Gross volume of block = 4.063 Litres	Cement: 9.78 (bag)
		Bearing area = 427 cm ²	
		Void = <i>Not relevant</i>	
Practical daily productivity for the full size block = 500 Nos.			
Number of blocks per bag = 102			

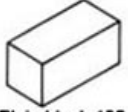
BLOCK HOLLOW DRY INTERLOCKING 300

	Use	Details	Quantities of materials per 1000 Blocks
	<p>These blocks are used for building disaster resistant constructions, as they have provisions for vertical and horizontal reinforcing elements. They are dry stacked and a concrete grout is cast in the holes to bind all vertical and horizontal joints.</p> <p>They can be used only for ground floor structures in seismic zones 3 and 4 (Indian zones).</p>	Full block size (L x W x H, in mm) = 299 x 150 x 100	Soil: 5.80 (m ³)
		Net volume of material = 4.009 Litres	Sand: 1.40 (m ³)
		Gross volume of block = 4.225 Litres	Cement: 9.75 (bag)
		Bearing area = 390 cm ²	
		Void = 10 %	
Practical daily productivity for the full size block = 500 Nos.			
Number of blocks per bag = 109			

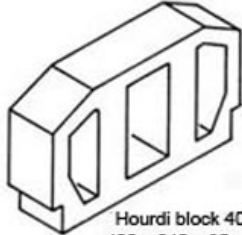
BLOCK HOLLOW 390

	Use	Details	Quantities of materials per 1000 Blocks
	<p>This block can be used for light load bearing structures up to two floors high.</p> <p>It presents the advantage of saving materials and providing better heat insulation.</p>	Full block size (L x W x H, in mm) = 390 x 190 x 90	Soil: 6.30 (m ³)
		Net volume of material = 4.582 Litres	Sand: 1.57 (m ³)
		Gross volume of block = 6.669 Litres	Cement: 10.50 (bag)
		Bearing area = 520 cm ²	
		Void = 29.7 %	
Practical daily productivity for the full size block = 600 Nos.			
Number of blocks per bag = 95			

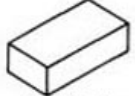
BLOCK PLAIN 190

 Plain block 190 190 x 90 x 90 mm	Use	Details	Quantities of materials per 1000 Blocks
	This block is used with the hollow block 390 for the partition walls. It can also be used for very light load bearing structures for ground floor only.	Full block size (L x W x H, in mm) = 190 x 90 x 90	Soil: 2.18 (m ³)
Net volume of material = 1.539 Litres		Sand: 0.54 (m ³)	
Gross volume of block = 1.539 Litres		Cement: 3.63 (bag)	
Bearing area = 171 cm ²			
Void = <i>Not relevant</i>			
Number of blocks per bag = 270			
Practical daily productivity for the full size block = 1,400 Nos. (3 blocks per stroke)			

BLOCK HOURDI 400

 Hourdi block 400 400 x 240 x 85 mm	Use	Details	Quantities of materials per 1000 Blocks
	This block is used to create floors and roofs. It rests either on reinforced concrete T beams or on ferrocement channels.	Block size (L x W x H, in mm) = 400 x 240 x 85	Soil: 7.14 (m ³)
Net volume of material = 5.266 Litres		Sand: 1.78 (m ³)	
Gross volume of block = 7.708 Litres		Cement: 11.9 (bag)	
Bearing area = <i>Not relevant</i>			
Void = 31.7 %			
Practical daily productivity for the full size block = 400 Nos.			
Number of blocks per bag = 84			

MINI BLOCK

 Mini block 140 x 70 x 50 mm	Use	Details	Quantities of materials per 1000 Blocks
	This block is used to build vaults and domes. It can be used alone when these structures have the same thickness (7 cm) or it can be used in combination with other blocks when the thickness varies (case for optimised vaults and domes).	Block size (L x W x H, in mm) = 140 x 70 x 50	Soil: 0.736 (m ³)
Net volume of material = 0.490 Litres		Sand: 0.186 (m ³)	
Gross volume of block = 0.490 Litres		Cement: 1.22 (bag)	
Bearing area = 35 cm ² (Block laid on edge)			
Void = <i>Not relevant</i>			
Practical daily productivity for the full size block = 1,400 Nos. (4 blocks per stroke)			
Number of blocks per bag = 820			