EZBASKET™

866-913-8363
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Round Dowel Submittal

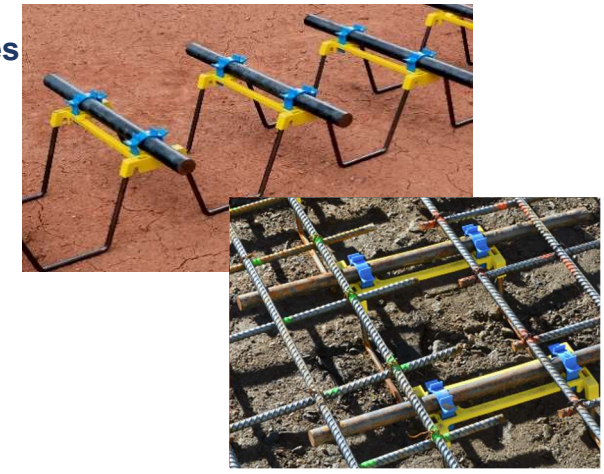
EZBASKET Specifications:

- ✓ All EZBASKET products are manufactured by McTech Group, Inc.
- ✓ Dowels will be saw cut from hot rolled bar per ASTM A36 Grade 60 to within 0.010" of specified length
- ✓ Round dowels will be cut from material meeting the requirements of AASHTO. M255M/ M255, AASHTO M334, ASTM A276, ASTM A312 or ASTM A1035(CS, CM and CL) *The grade shall be specified by the purchasing agency*.
- ✓ Dowel sleeves, both tapered and round, shall be molded from polypropylene – no break
- ✓ Side frame supports will be fabricated from o.283 or 0.375 diameter cold drawn wire per ASTM 510/A510.
- ✓ The finished assembly will hold the Dowels to within plus or minus 1/8" of the required slab placement depth remain stable under concrete placement.
- ✓ Dowels can be coated with Tectyl or any project approved bond breaker.

EZBASKET Features and Mechanical Properties

Features:

- ASTM A36 Grade 60 hot rolled smooth round steel bars
- Available diameters: ¾", 1", 1-¼" & 1-1/2"
- Lengths range from 16" to 36"
- Dowel spacing: 12" O/C, 18" O/C & 24" O/C
- Epoxy and Red Oxide coatings available



Mechanical Properties: ASTM A 36 Grade 60

Yield strength	60,000 psi
Tensile Strength	90,000 psi

Fast, Simple Assembly

- ✓ With the use of the EZBASKET jig assembly is just a quick snap of the side frame into the specially designed plastic sleeve, snap in the dowel sleeve clips and the assembly is complete. See video: **https://youtu.be/lhzfePlqpgU**
- ✓ Easy to handle, can be carried and installed by one person during concrete placement.
- ✓ EZBASKET components are crated /boxed /palletized as required for easy handling and reduced freight costs.

US PATENT NO. 11,149,385

The round dowel will be inserted into a specially designed plastic sleeve that will be friction fitted onto the wire side frame to hold the finished dowel assembly at plus or minus 1/8" of the required slab placement depth. Round dowels will be secured to a specially designed plastic sleeve with two non removeable clips and friction fitted to the wire side frame to hold the round dowel at the prescribed depth in the pavement.

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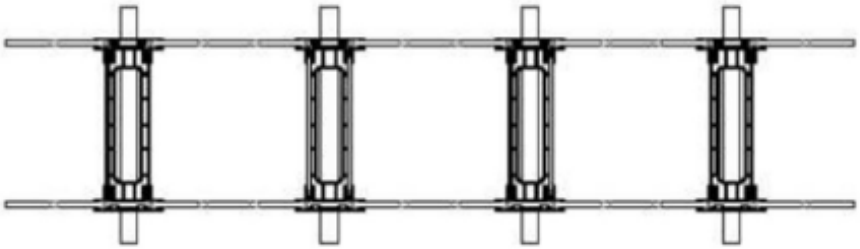
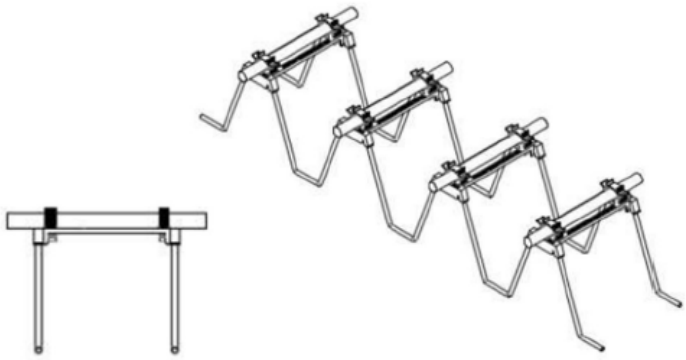
Typical Deflection & Bearing Stress

Pavement thickness	Dowel Size	Dowel Spacing	Peak Edge Stress (psi)	Peak Corner Deflection (in)	Peak Edge Deflection (in)	Peak Dowel Bearing Stress (psi)
7 in	1 in	12 in	271	0.032	0.013	4410
9 in	1.25 in	12 in	170	0.024	0.011	2717
11 in	1.5 in	12 in	105	0.019	0.010	2234
14 in	1.5 in	12 in	77	0.015	0.008	1769





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Dowel Basket – ACI 360

Table 5.1—Dowel size and spacing for construction and contraction joints[1]

Slab depth, in. (mm)	Dowel dimensions, in. (mm)			Dowel spacing center-to center, in. (mm)		
	Round[4]	Square[3,5]	Plate Dowel	Round[4]	Square[3,5]	Plate Dowel
5 to 6 (130 to 150)	3/4 x 14 (19 x 360)	3/4 x 14 (19 x 360)	M/R[2]	12 (300)	14 (360)	18 (460)
7 to 8 (180 to 200)	1 x 16 (25 x 410)	1 x16 (25 x 410)	M/R[2]	12 (300)	14 (360)	18 (460)
9 to 11 (230 to 280)	1-1/4 x 18 (32 x 460)	1-1/4 x 18 (32 x 450)	M/R[2]	12 (300)	12 (300)	18 (460)

1. Table values based on a maximum joint opening of 0.20 in. (5 mm). Dowels must be carefully aligned and supported during concrete operations. Misaligned dowels may lead to cracking. Spacings are based on dowels in direct contact on the concrete with a thin bond breaker. Total dowel length includes allowance made for joint opening and minor errors in positioning dowels.
2. M/R= Manufacturers' Recommendations. Because of the various plate dowel geometries and installation devices available from the different manufacturers, the manufacturers should be consulted for their recommended plate dowel size and spacing.
3. Square dowels should have compressible material securely attached on both vertical faces.
4. ACI Committee 325 (1956)
5. Walker and Holland (1998)

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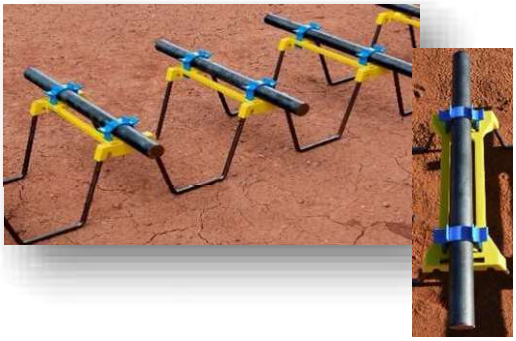
CARBON FOOTPRINT PROFILE

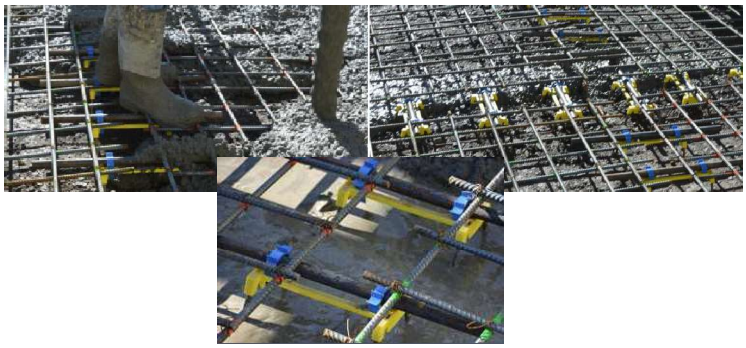
EZ Basket has the lowest carbon footprint compared to all of the commercially available load transfer products currently in the marketplace. The combination of A36 steel, ASTM A510 wire and “no break” polypropylene has produced a load transfer product that has lower CO2 manufacturing emissions than traditional competitors due to the following design/manufacturing advantages:

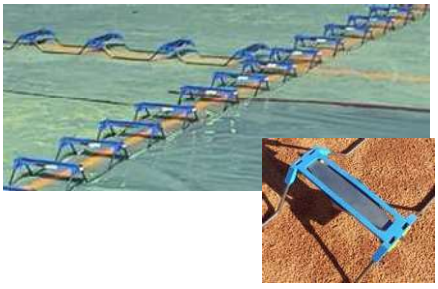


- ✓ The unique substitution of polypropylene to replace more the fifty (50%) of the metal wire normally required for dowel support.
- ✓ Polypropylene components weigh less than metal wire while supplying equal or greater tensile strength and having a lower specific gravity than wire.
- ✓ Due to its lower overall weight EZ Basket also reduces the embedded energy CO2 emissions from transportation of product from factory to end user.

- ✓ Wire and steel production require more energy than producing polypropylene.
- ✓ The Global Warming Potential (GWP) on the wire and steel used in EZ Basket, without renewable energy certificates, is compliant with a GWP limit of 779kg CO2 per metric ton of materials.

Flexibility in design with polypropylene cannot be matched by metal wire therefore providing the unique advantage of creating complex shapes as in the example of the EZ Basket dowel sleeve, which eliminates welding and further reduces the CO2 emissions from the product manufacturing process.





Thank You for your interest in McTech Group!

Website: www.mctechgroup.com