



SPEED DOWEL®
PATENTED CONCRETE DOWELING SYSTEM

U.S Patent Numbers 5,678,952 5,934,821 and D419,700 Australian Patent Number 722,219



SPEED DOWEL® is the superior choice for slab on ground and vertical wall construction joints. Applications for SPEED DOWEL® and SPEED LOAD are limitless; typical projects include:

- Big Box Stores
- Commercial / Industrial Developments
- Distribution Centers
- Parking Facilities
- Manufacturing Facilities
- Entertainment Centers
- Warehouses
- Airports

Reduce slip dowel installation costs by 50% and ensure proper alignment

SPEED DOWEL® is the slip dowel installation system preferred by engineers and contractors alike.

SPEED DOWEL® provides a highly effective method for constructing superior quality construction joints in concrete flatwork. Additionally, **SPEED DOWEL®** cuts the time and labor of conventional slip dowel installation in half.

SPEED LOAD performs a similar function for expansion joints. Easy to install **SPEED LOAD** will provide properly aligned dowels for positive load transfer.



GREENSTREAK GROUP, INC.

Learn more at Greenstreak.com or email: info@greenstreak.com
3400 Tree Court Industrial Blvd. • St. Louis, MO 63122 USA
Phone (800) 325-9504 or (636) 225-9400 • Fax (800) 551-5145 or (636) 225-2049

Quality Assurance for Functioning Concrete Joints

The **SPEED DOWEL**[®] System offers designers a practical method to adhere to the recommendations of the American Concrete Institute.

A properly designed slab includes a dowel system to transfer loads across, and manage stresses within, the joints. Misaligned dowels can cause cracking, which affects slab appearance and performance, leading to increased maintenance and repair costs.

“Load transfer is accomplished through aggregate interlock, through a preformed key, or by the use of a dowelled joint.”
ACI 224.3R-95 (Reapproved 2008) 5.2.4

“In areas subjected to wheeled traffic, heavy loads, or both, joints with dowels are recommended. If dowels are required, provisions should be made along the bulkhead to ensure proper alignment during construction and finishing operations.”
ACI 360R-06 5.1.2

“The dowels should be centered on the joint. To permit horizontal movement, the dowels must not bond to the concrete on at least one side of the joint.”
ACI 224.3R-95 (Reapproved 2008) 5.2.4.3

“For dowels to be effective, they should be smooth, aligned, and supported so they will remain parallel in both the horizontal and the vertical planes during the placing and finishing operation. All dowels should be sawn and not sheared. Properly aligned, smooth dowels allow the joint to open as concrete shrinks.” ACI 302.1R-04 3.2.7

3-Step **SPEED DOWEL**[®] Method

Save Time and Improve Quality with **SPEED DOWEL**[®]



Step - 1
Attach base to edge form and tap on sleeve



Step - 2
Make first placement of concrete



Step - 3
Strip form and insert dowel into **SPEED DOWEL**[®]

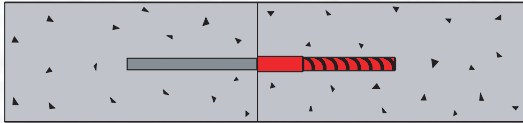
10-Step Conventional Method

HAND TWISTING of dowels can create pocket voids

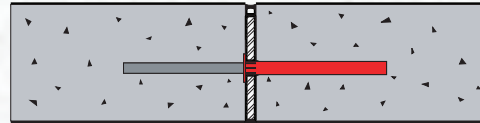
- 1 Drill stacked lumber (edge form)
- 2 Insert dowel into edge form
- 3 Grease one half side of dowel
- 4 Make first placement of concrete
- 5 Align and position dowel
- 6 Rotate dowel to loosen bond
- 7 Remove dowel
- 8 Strip edge form
- 9 Reinsert dowel into cavity
- 10 Bend dowel to align and position



Typical Joint Systems and Proper Slip Dowel Alignment



SPEED DOWEL® in typical construction joint



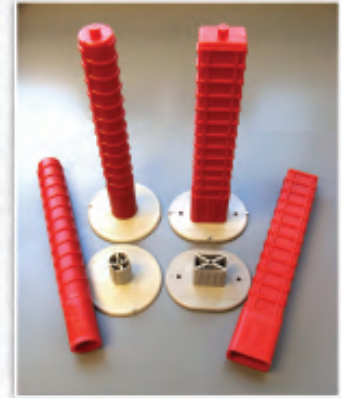
SPEED LOAD in typical expansion joint

SPEED DOWEL® Sleeves and Bases

Sleeve Code	Round Dowel Size	Sleeve Length	Base Code
PSD09/#4TX	5/8" Smooth or #4 Rebar X 18"	9"	PSD/#4BX
PSD12/#4TX	5/8" Smooth or #4 Rebar X 24"	12"	
PSD09/#5TX	3/4" Smooth or #5 Rebar X 18"	9"	PSD/#5BX
PSD12/#5TX	3/4" Smooth or #5 Rebar X 24"	12"	
PSD09/#6TX	7/8" Smooth or #6 Rebar X 18"	9"	PSD/#6BX
PSD12/#6TX	7/8" Smooth or #6 Rebar X 24"	12"	
PSD09/#7TX	1" Smooth or #7 Rebar X 18"	9"	PSD/#7BX
PSD12/#7TX	1" Smooth or #7 Rebar X 24"	12"	
PSD09/#9TX	1 1/4" Smooth or #9 Rebar X 18"	9"	PSD/#9BX
PSD12/#9TX	1 1/4" Smooth or #9 Rebar X 24"	12"	
PSD10/#11TX	1 1/2" Smooth or #11 Rebar X 20"	10"	PSD/#11BX
PSD230x20TL	20mm X 460mm Round Dowel	230mm	PSD20BL
PSD305x20TL	20mm X 610mm Round Dowel	305mm	
Code	Square Dowel Size	Length	Code
PSDQ09X3/4TX	3/4" x 18" Square Dowel	9"	PSDQ3/4BX
PSDQ12X3/4TX	3/4" x 24" Square Dowel	12"	
PSDQ230X20TL	20mm X 460mm Square Dowel	230mm	PSDQ20BL
PSDQ305X20TL	20mm X 610mm Square Dowel	305mm	

SPEED LOAD Sleeves

Sleeve Code	Round Dowel Size	Sleeve Length
PSD1/2X5LT	1/2" x 10" Smooth Dowel	5"
PSD1/2X9LT	1/2" x 18" Smooth Dowel	9"
PSD3/4X5LT	3/4" x 10" Smooth Dowel	5"
PSD3/4X9LT	3/4" x 18" Smooth Dowel	9"
PSD3/4X12LT	3/4" x 24" Smooth Dowel	12"
PSD1X9LT	1" x 18" Smooth Dowel	9"
PSD125X9LT	1 1/4" x 18" Smooth Dowel	9"



SPEED DOWEL® bases and sleeves are sold separately. Bases are reusable; consider this when determining requirements.

U.S. Patent Numbers 5,678,952 and 5,934,821

Australian Patent Number 722,219



SPEED LOAD is a single component for use in expansion joints.

U.S. Patent Number D419,700

Please consult a Greenstreak Technical Engineer for your specific project needs or if using with epoxy coated dowels.



SPEED DOWEL
PATENTED CONCRETE DOWELING SYSTEM

**SPEED DOWEL® AND SPEED LOAD
PHYSICAL PROPERTIES**

Material Composition	100% recycled polypropylene
Compressibility ASTM D 695	5,500 - 8,000 PSI
Thickness (Nominal)	
Speed Dowel Sleeve	0.125"
Speed Load Sleeve	0.075"
Density	0.88 - 0.92 g/cc
Fatigue Resistance	Excellent**
Impact / Stiffness Balance	Excellent**

**Excerpted from DOW CHEMICAL "Typical Characteristics of Polypropylene"

SPEED DOWEL® and **SPEED LOAD** are comprised of 100% polypropylene. "In general, polypropylene is not susceptible to environmental stress cracking, and it can be exposed under load in the toughest environments."

SPECIFICATIONS

CSI Format, Three Part Specifications are available upon request and our Technical Service Group is ready to assist with written specifications. Please call (800) 325-9504 or (636) 225-9400 for further assistance.

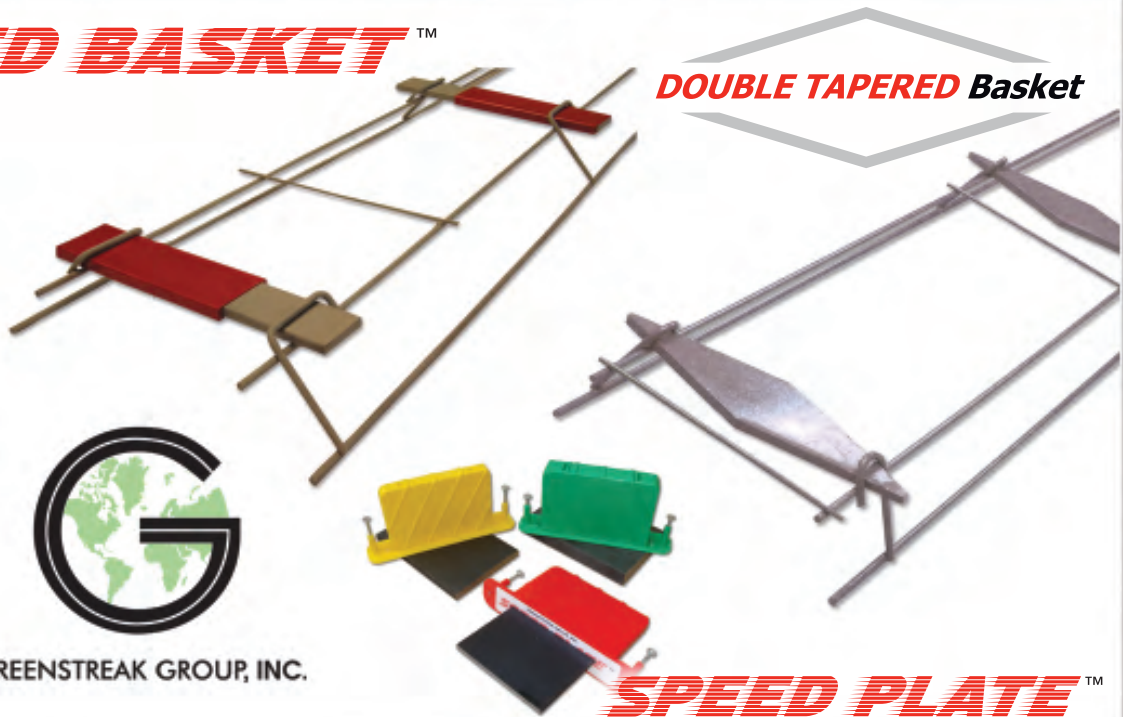
**SUGGESTED PROPRIETARY SHORT FORM GUIDE
SPECIFICATION SECTION 03252**

Provide SPEED DOWEL® SYSTEM, to accept ____ diameter X ____ long slip dowels (fill in appropriate slip dowel dimensions) by GREENSTREAK GROUP, INC.; 3400 Tree Court Industrial Blvd.; St. Louis, MO 63122 USA Phone (800) 325-9504 or (636) 225-9400.

Other Greenstreak Dowelling Systems

SPEED BASKET™

Greenstreak offers designers a variety of options including Speed Dowel and Speed Plate for Construction Joints and Double Tapered Basket and Speed Basket for Saw Cut Contraction Joints.



GREENSTREAK GROUP, INC.

**Please consult a Greenstreak
Technical Engineer for your specific project needs.**

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WARRANTY: GREENSTREAK warrants to the Buyer that this product will be free of defects and will perform as represented in writing subject to the following (2) conditions. First, the application of the product and the concrete construction practices used in the application are in accordance with GREENSTREAK's recommendations. Second, the Buyer has selected the proper product for the specific application required. GREENSTREAK disclaims any responsibility for the selection of a particular SPEED DOWEL® or SPEED LOAD product. Product selection is the sole responsibility and decision of the Buyer.