

SPIROL[®]

DISC SPRINGS STACKS FOR MASS TIMBER

SPIROL is an industry leader in collaborating with building and structural engineering companies in the mass timber industry to provide Application Engineering Support, DIN EN 16983 (formerly DIN 2093) Disc Springs (also known as Belleville washers), and Pre-Assembled Disc Spring Stacks. One issue that occurs with mass timber is the swelling and shrinking of the wood due to moisture exposure. By utilizing Disc Spring Stacks, when added to a connector or fastener, the force created by the engineered wood expanding or contracting is absorbed. By absorbing the force, this decreases the impact of the wood's movement on the integrity of the fasteners and the overall structure.



Benefits of using Disc Springs in Mass Timber:

Predictable Force

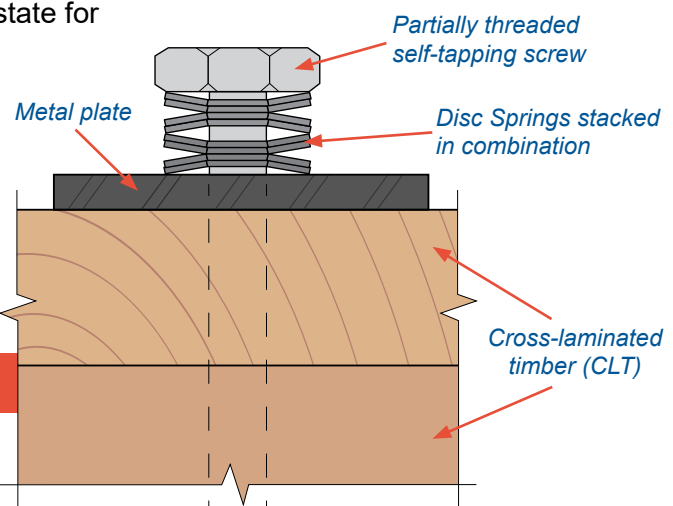
- Structural Engineers can design Disc Spring Stacks using forces per the DIN EN 16983 standard.
- Disc Spring Stack configuration can be tailored to achieve desired force.
- Disc Spring Stack absorbs the force created by swelling and shrinking of wood.
- Disc Spring Stack can exist in a pre-loaded state for an extended time before needed.

Predictable Fatigue Life

- Disc Springs manufactured to DIN EN 16983 allows for a calculable fatigue life.



Learn More!





Benefits of Purchasing Pre-Assembled Disc Spring Stacks Include:

- Delivery to the construction site as a pre-assembled unit
- Eliminating the need for on-site configuration of the stack
- Decreasing construction time
- Ensuring proper stack configuration accuracy



SPIROL Pre-Assembled Disc Spring Stacks ready to be dropped in place

SPIROL's Application Engineers will help you from start to finish!

We will assist on new designs, help resolve issues, and recommend cost savings on existing designs. Visit our complimentary **Application Engineering Services** on **SPIROL.ca** to get started.



Technical Centres

Americas **SPIROL Canada**
Windsor, Ontario
+1 519 974 3334
info-ca@spirol.com

SPIROL International Corporation
Connecticut, USA
+1 860 774 8571
info@spirol.com

SPIROL Shim Division
Ohio, USA
+1 330 920 3655
info@spirol.com

SPIROL Mexico
Apodaca, Nuevo León
+52 81 8385 4390
info-mx@spirol.com

SPIROL Brazil
Indaiatuba, São Paulo
+55 19 3936 2701
info-br@spirol.com

Europe **SPIROL United Kingdom**
Corby, Northants, England
+44 (0) 1536 444800
info-uk@spirol.com

SPIROL Ford
South Shields, Tyne & Wear, England
+44 (0) 1914 540141
contactus@ford-engineering.com

SPIROL France
Saint-Léonard
+33 (0) 3 26 36 31 42
info-fr@spirol.com

SPIROL Germany
Münich
+49 (0) 89 4 111 905 71
info-de@spirol.com

SPIROL Spain
Barcelona
+34 932 71 64 28
info-ib@spirol.com

SPIROL Czech Republic
Prague
+420 226 218 935
info-cz@spirol.com

SPIROL Poland
Warsaw
+48 510 039 345
info-pl@spirol.com

Asia Pacific **SPIROL China**
Shanghai
+86 (0) 21 5046-1451
info-cn@spirol.com

SPIROL Malaysia
Iskandar Puteri, Johor
+60 77 063 960
info-my@spirol.com

SPIROL Korea
Seoul, South Korea
+82 (0) 10 9429 1451
info-kr@spirol.com