# Structural Analysis & Design Software

**Dlubal**

**Amy Heilig, PE**
Presenter

CEO – USA Office

**Alex Bacon, EIT**
Moderator

Technical Support Engineer
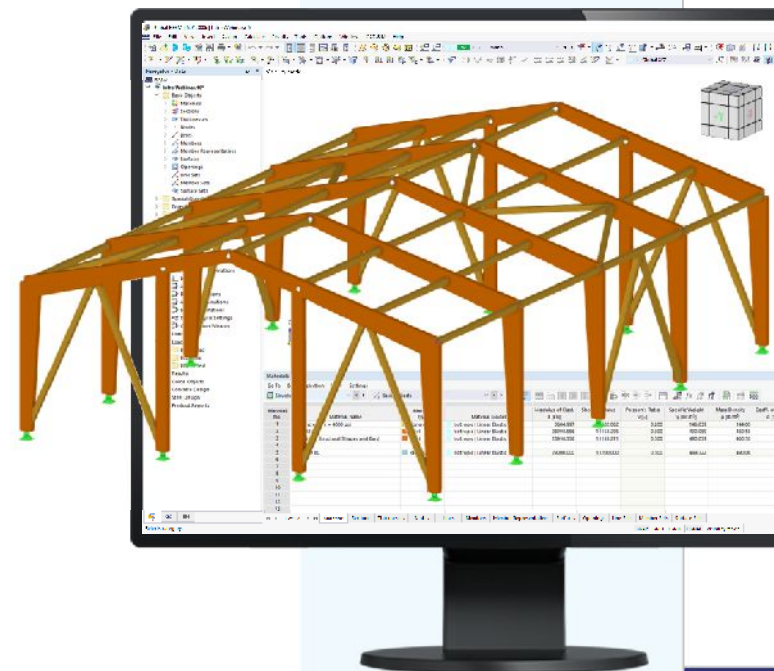
**Cisca Tjoa, PE**
Moderator

Technical Support Engineer

**Dlubal**

# NDS 2018 Timber Design in RFEM 6

# Questions During the Presentation

GoToWebinar Control Panel
**Desktop**

E-mail: **info-us@dlubal.com**

**Show or hide control panel**

**Adjust audio settings**

**Ask questions**

File  View  Help

▼ Audio

Sound Check

○ Computer audio
○ Phone call

🎤 MUTED

Mikrofon (2- Sennheiser USB h...

Lautsprecher (2- Sennheiser U...

▼ Questions

[Enter a question for staff]

Send

Webinar ID: 373-901-987
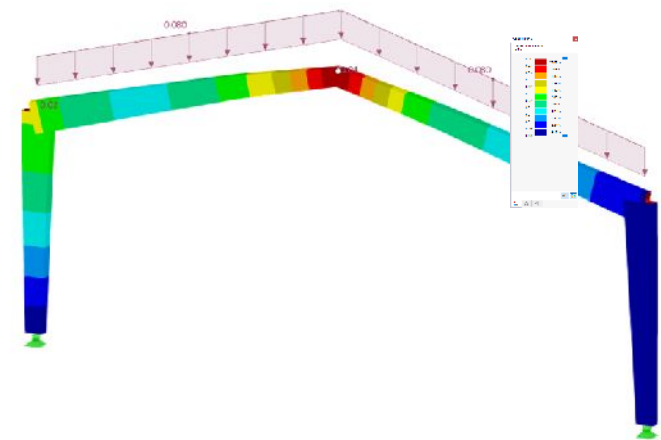
GoToWebinar

# CONTENT

Webinar

4
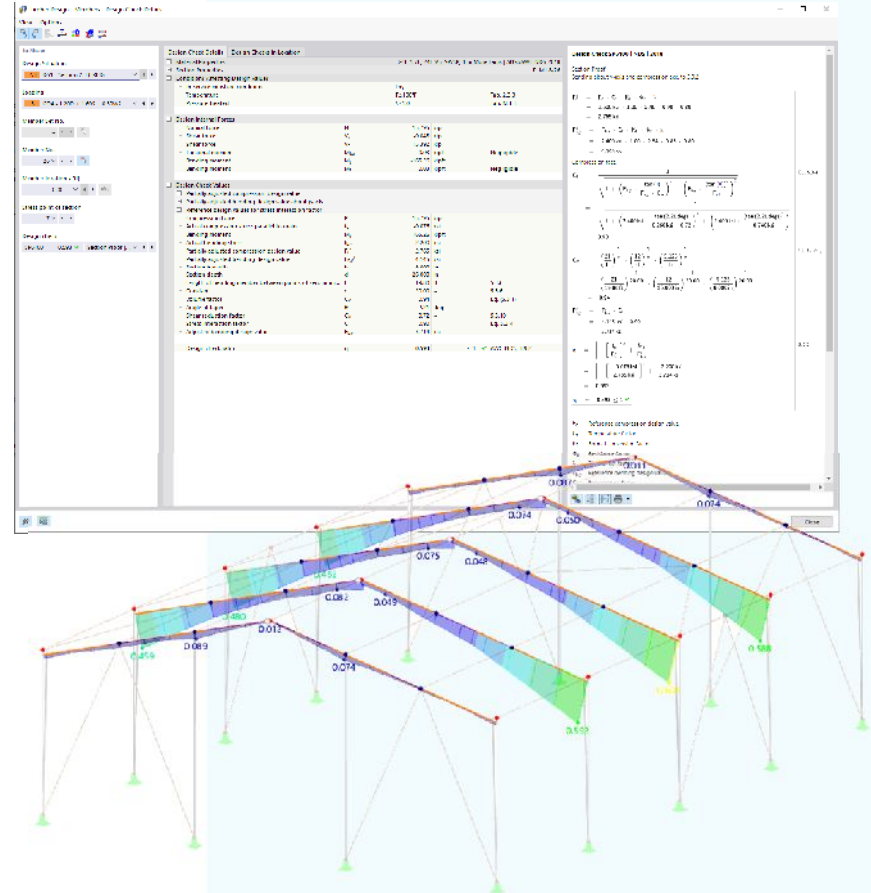
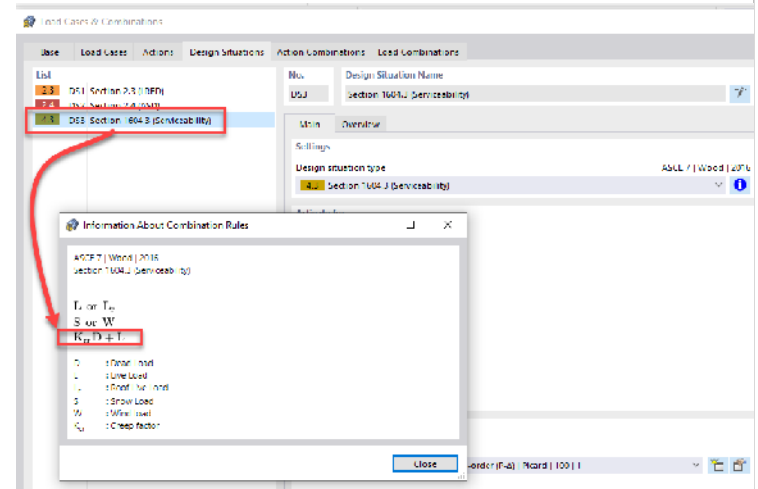# New! Creep Considerations

**NDS 2018 Sect. 3.5.2. Long-Term Loading**

- Time dependent deformation (creep) factor ($K_{cr}$)

$$\Delta_T = K_{cr}\Delta_{LT} + \Delta_{ST} \quad \text{(Eqn. 3.5-1)}$$

- For ASCE 7-16 | Wood combination wizard, IBC 2018 Sect. 1604.3 Design Situation (DS) created for serviceability checks

- Load Combination (CO) = $K_{cr}D + L$ within the DS to consider creep

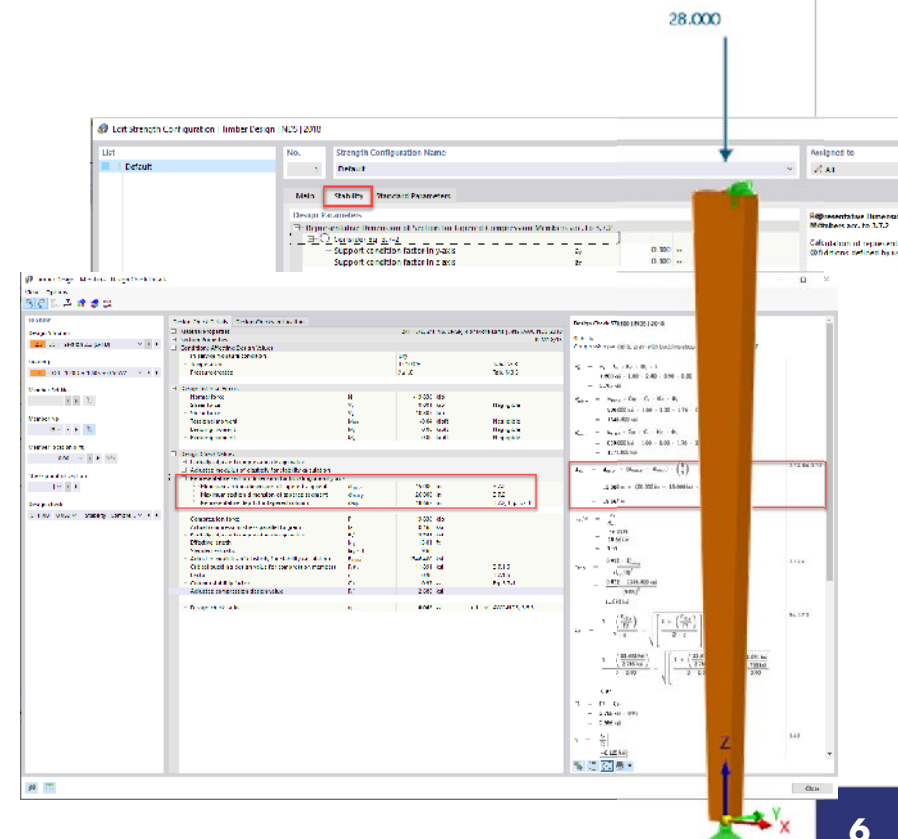# New! Tapered Column Representative Dimension

**NDS 2018 Sect. 3.7.2 Tapered Columns**

- Previously, depth at x-location used

- Representative dimension for tapered column (d)

- Eqn. 3.7-2 or 3.7-3 depending on support conditions

$$d = d_{min} + (d_{max} - d_{min})\left[a - 0.15\left(1 - \frac{d_{min}}{d_{max}}\right)\right] \quad \text{(Eqn. 3.7-2)}$$

$$d = d_{min} + (d_{max} - d_{min})\left(\frac{1}{3}\right) \quad \text{(Eqn. 3.7-3)}$$

- Eqn. preference set under Timber Strength Configuration - Stability

# New! Compression Perpendicular to the Grain

**NDS 2018 Sect. 3.10.2 Bearing Perpendicular to the Grain**

- Previously, bearing area was not known

- Now defined with member "design supports"

- Consider reference design compression values perpendicular to grain at deformation limit 0.04" ($F_{c\perp}$) or 0.02" ($F_{c\perp 0.002}$) [Sect. 4.2.6]

- Calculated compression force/design value ratio
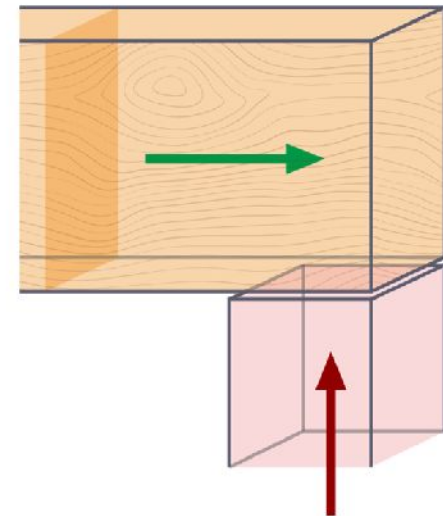
# Free Online Services
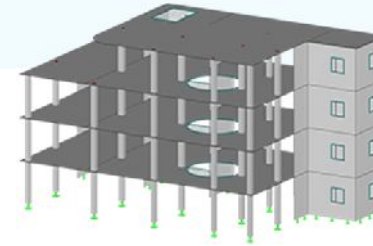
### Geo-Zone Tool

Dlubal Software provides an online tool with snow, wind and seismic zone maps.

### Cross-Section Properties

With this free online tool, you can select standardized sections from an extensive section library, define parametrized cross-sections and calculate its cross-section properties.
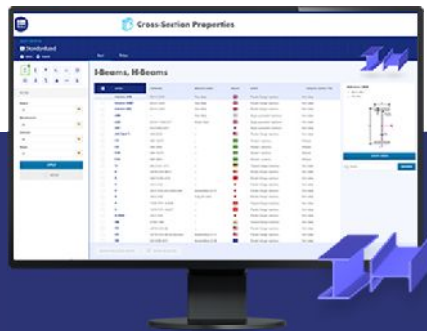
### FAQs & Knowledge Base

Access frequently asked questions commonly submitted to our customer support team and view helpful tips and tricks articles to improve your work.

### Models to Download

Download numerous example files here that will help you to get started and become familiar with the Dlubal programs.
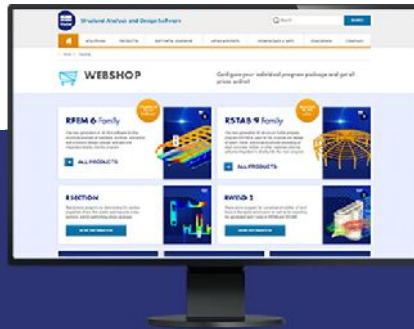
# Free Online Services

## Youtube Channel - Webinars, Videos

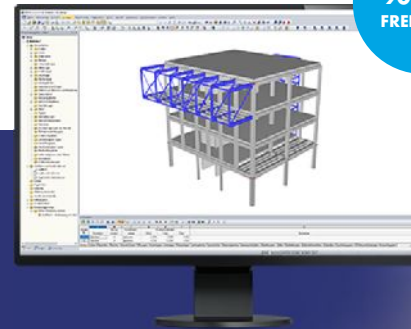Videos and webinars about the structural engineering software.



## Webshop with Prices

Configure your individual program package and get all prices online!



## Trial Licenses

The best way how to learn using our programs is to simply test them for yourself. Download a 90-day free trial version of our structural analysis & design software.

**90-DAY FREE TRIAL**



Webinar

# Dlubal Software Information

**Visit website**

**www.dlubal.com**

→ **Videos and recorded webinars**

→ **Events and conferences**

→ **Knowledge Base articles**

→ **FAQs**

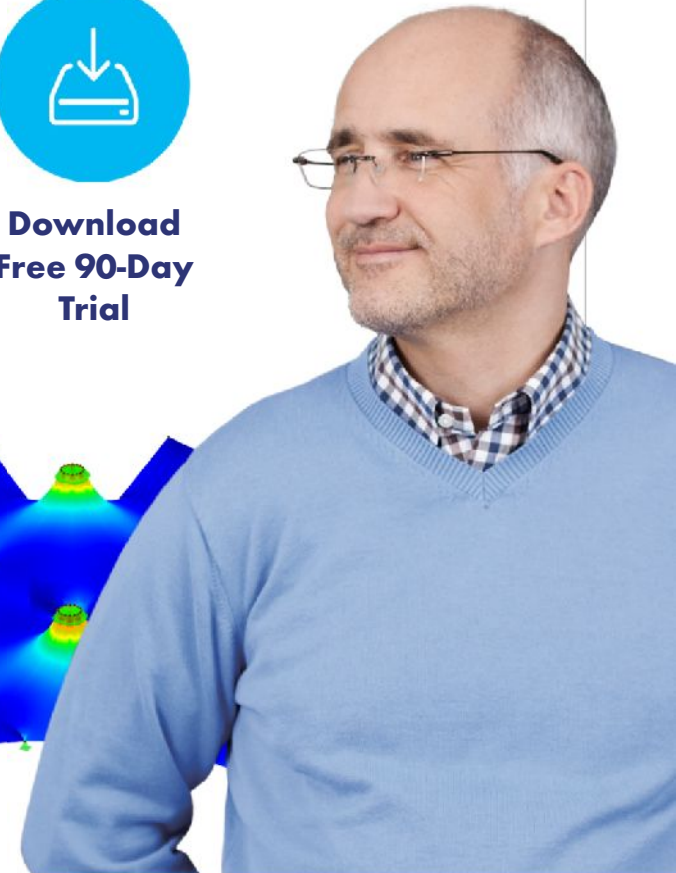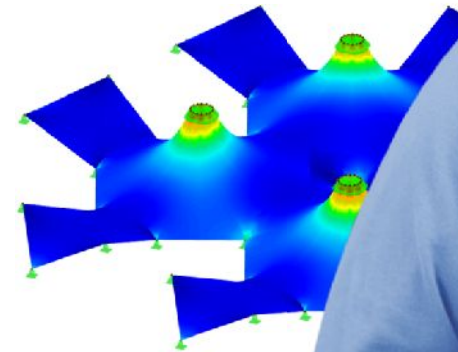**Register for Upcoming Webinars**

**Download Free 90-Day Trial**

**Dlubal Software, Inc.**
The Graham Building, 30 South 15th Street,
15th Floor, Philadelphia, PA 19102

Phone: (267) 702-2815
Email: info-us@dlubal.com

# Webinars and PDH

## Upcoming Webinars

**1** Register **www.dlubal.com**

**2** Support & Learning
� **Webinars**

**3** Registration through **email**

## PDH Certificates

**1** **Automatically emailed** to participants

**2** Available for the **full presentation**

**3** Additional attendees request
**info-us@dlubal.com**


Continuing Education Certificate

For successfully completing the webinar:
**Introduction to the New RFEM 6**

Participant
**John Smith**

www.dlubal.com