

# Release notes IDEA StatiCa Concrete & Prestressing version 9

Some of below mentioned improvements have been released in latest patches of IDEA StatiCa 8.2.

## Lateral instability for slender beams

New check is now available (as default) in Beam, BIM and Frame applications in Concrete Design 1D. Checkbox for switching on/off is in last section of Data and input of relevant values is in the new Lateral stability tab in navigator. The results can be obtained for both, persistent and transient situations according EN 1992-1-1 article 5.9 (3).

Data											
Lateral stability											
	Check	Description	b [m]	h [m]	l0t [m]	Situation	l0t / b [-]	Limit [-]	h / b [-]	Limit h / b [-]	Status
	<input checked="" type="checkbox"/>	Crane	0.80	1.20	20.00	Transient	25.00	61.15	1.50	3.50	
>	<input checked="" type="checkbox"/>	End of design working life	0.80	1.20	20.00	Persistent	25.00	43.68	1.50	2.50	

## Elastic modulus input in construction stages

New check is now available (as default) in Beam, BIM and Frame applications in Concrete Design 1D. Checkbox for switching on/off is in last section of Data and input of relevant values is in the new Lateral stability tab in navigator. The results can be obtained for both persistent and transient situations according EN 1992-1-1 article 5.9 (3).

Construction and service stages					Update combinations		Generate combinations	
	Name	Time [d]	Check	Description				
	<input checked="" type="checkbox"/> 1	Casting	0.0	<input type="checkbox"/>				
>	<input checked="" type="checkbox"/> 2	Transfer of prestressing	1.2	<input checked="" type="checkbox"/>				
	<input checked="" type="checkbox"/> 3	Storage yard	5.1	<input type="checkbox"/>				
	<input checked="" type="checkbox"/> 4	Transport	25.0	<input type="checkbox"/>				
	<input checked="" type="checkbox"/> 5	Temporary supports	26.0	<input type="checkbox"/>				
	<input checked="" type="checkbox"/> 6	Casting of composite slab	28.0	<input checked="" type="checkbox"/>				
	<input checked="" type="checkbox"/> 7	Final supports	35.0	<input checked="" type="checkbox"/>				
	<input checked="" type="checkbox"/> 8	Superimposed dead load	60.0	<input type="checkbox"/>				
	<input checked="" type="checkbox"/> 9	End of design working life	18250.0	<input checked="" type="checkbox"/>				

<ul style="list-style-type: none"> <li>In-plane restraint                             <ul style="list-style-type: none"> <li>In-plane restraint <input type="checkbox"/></li> </ul> </li> <li>Concrete strength in current construction stage                             <ul style="list-style-type: none"> <li>User-specified concrete strength <input type="checkbox"/></li> <li>fck [MPa] 7.3</li> <li>User-specified concrete modulus <input checked="" type="checkbox"/></li> <li>Ecm [MPa] <b>25000.0</b></li> </ul> </li> <li>Beam spans                             <ul style="list-style-type: none"> <li>L1 [m] 0.00</li> <li>L [m] 15.00</li> <li>L2 [m] 0.00</li> </ul> </li> <li>Temporary supports                             <ul style="list-style-type: none"> <li>To design position <input checked="" type="checkbox"/></li> </ul> </li> </ul>
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## Midas Civil BIM link improvement

A small improvement for our users of BIM link between Midas Civil and IDEA StatiCa BIM. Two dialogs at the beginning of process can be avoided if we do two things.

- Save settings

**Settings for Design groups and Design members generation**

**Design member (DM)**

DM consists of one or more consequential structural members and is designed as the whole.

Create default DMs for whole structure

**Options**

Try to connect horizontal members into single DMs

Try to connect vertical members into single DMs

Design member has the same name as the first involved member.

**Design group (DG)**

DG is a collection of DMs of the same cross-section and material.

Create design groups also for 2D members

**Concrete**

Tolerance of DM length  m

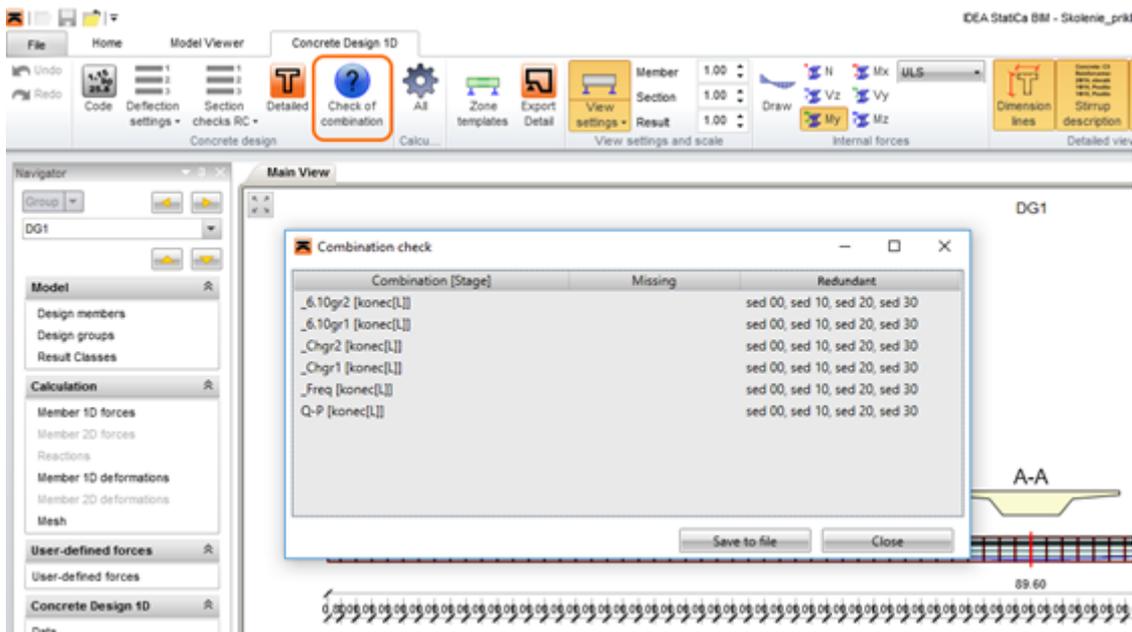
**Steel**

Tolerance of DM length  m

Collect DMs to one design group without respecting the number and length of their individual structural members.

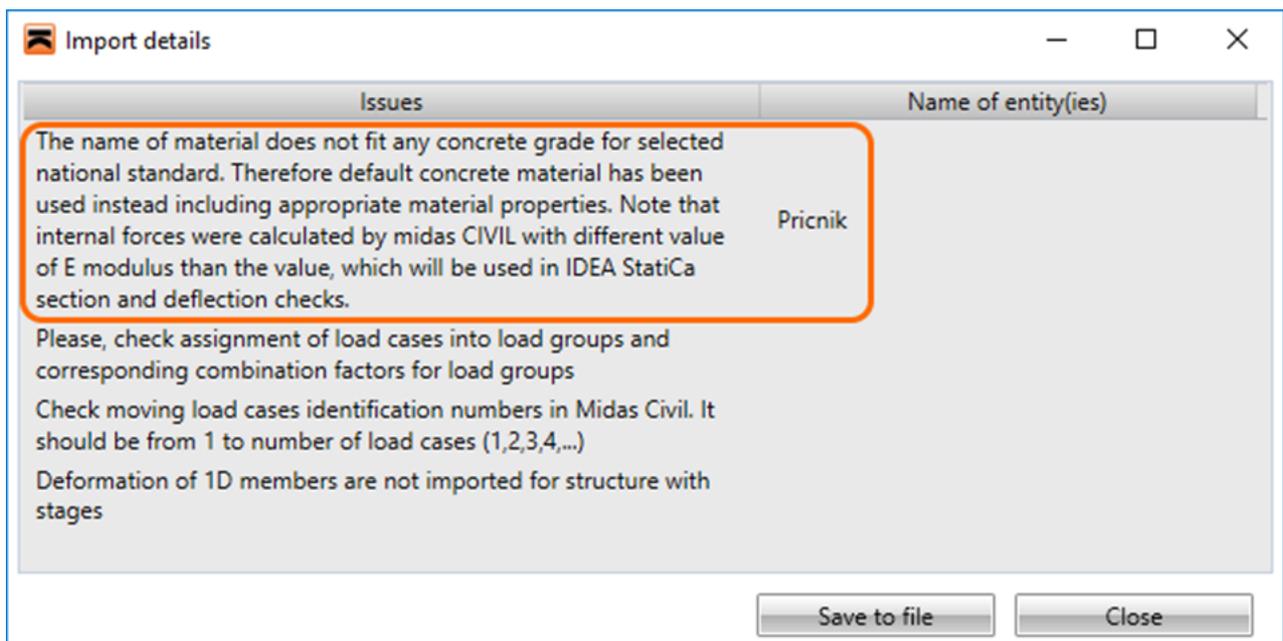
Do not show this dialog again

Once we set all checkboxes as desired, we can tick checkbox “Do not show this dialog again” and Save settings. They can be changed anytime later by following ribbon button Settings:



- Have correct data

If we don't find any non-conformity in your imported project, the next dialog won't pop-up. In case we find one, it will appear automatically. If you would like to review them later, it will be possible now by previously shown ribbon button Nonconformities.



Another improvement is helpful while trying to find missing or redundant load cases in combinations. E.g., if the permanent load case is included in combination prescription but is not to be found in any of construction stages, we might get wrong values or the combination won't be taken into account (marked as incorrect). It can be accessed in Reinforcement tab before the export to RCS.

The screenshot displays the IDEA StatiCa Concrete software interface. The 'Concrete Design 1D' ribbon is active, with the 'Check of combination' button highlighted. A 'Combination check' dialog box is open, showing a table of combinations and their status. The background shows a structural model with a section line A-A and a dimension of 89.60.

Combination [Stage]	Missing	Redundant
.6.10gr2 [konec[L]]		sed 00, sed 10, sed 20, sed 30
.6.10gr1 [konec[L]]		sed 00, sed 10, sed 20, sed 30
.Chgr2 [konec[L]]		sed 00, sed 10, sed 20, sed 30
.Chgr1 [konec[L]]		sed 00, sed 10, sed 20, sed 30
.Freq [konec[L]]		sed 00, sed 10, sed 20, sed 30
Q-P [konec[L]]		sed 00, sed 10, sed 20, sed 30