

Расчет перекрытия на четырех колоннах

4.4.1 Description of the Structure

Structure B was a 15 m square, 250 mm deep normally reinforced high strength concrete slab, supported by four 300 mm square columns at 9 m centres (Figure 4.57). The slenderness ratio of 36 is high for a classically reinforced structure. The characteristic strength of the concrete was approximately 120 N/mm^2 at the time of testing (Price, 1996). The slab was constructed as part of a separate investigation into the use of high strength concrete. Four weeks after construction, the slab was loaded to 13.125 kN/m^2 which caused heavy cracking.

The cracked floor structure was tested in three configurations.

Configuration 1: In its bare condition (i.e. no access floors) (Figure 4.58).

Configuration 2: With a Hewetson RMG 600 medium grade access floor system installed with an FFH of 500 mm (Figure 4.59). For this configuration, the panels were loose laid onto the pedestals.

Configuration 3: Same as Configuration 2 but with the panels mechanically fixed to the pedestals.

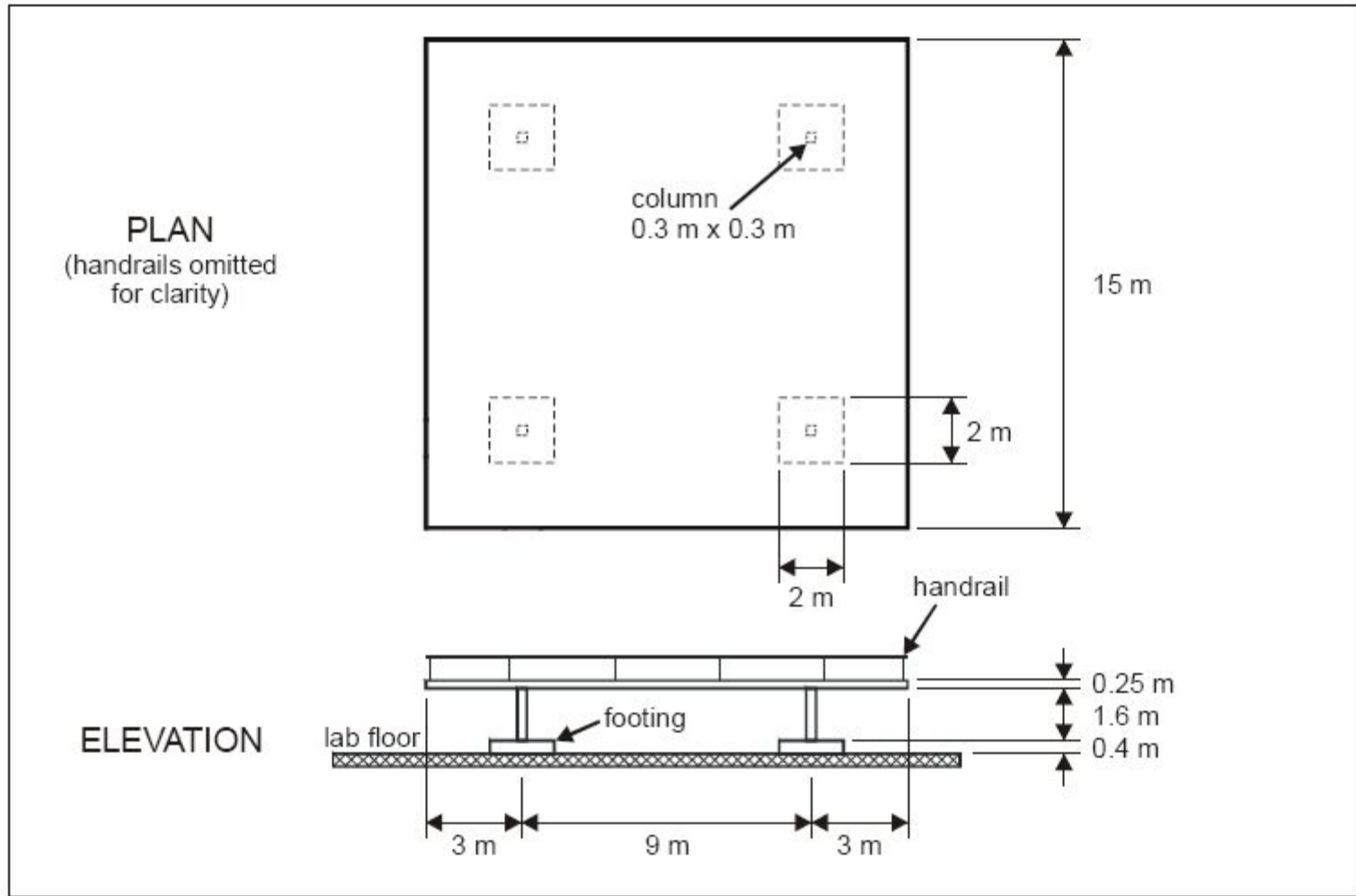
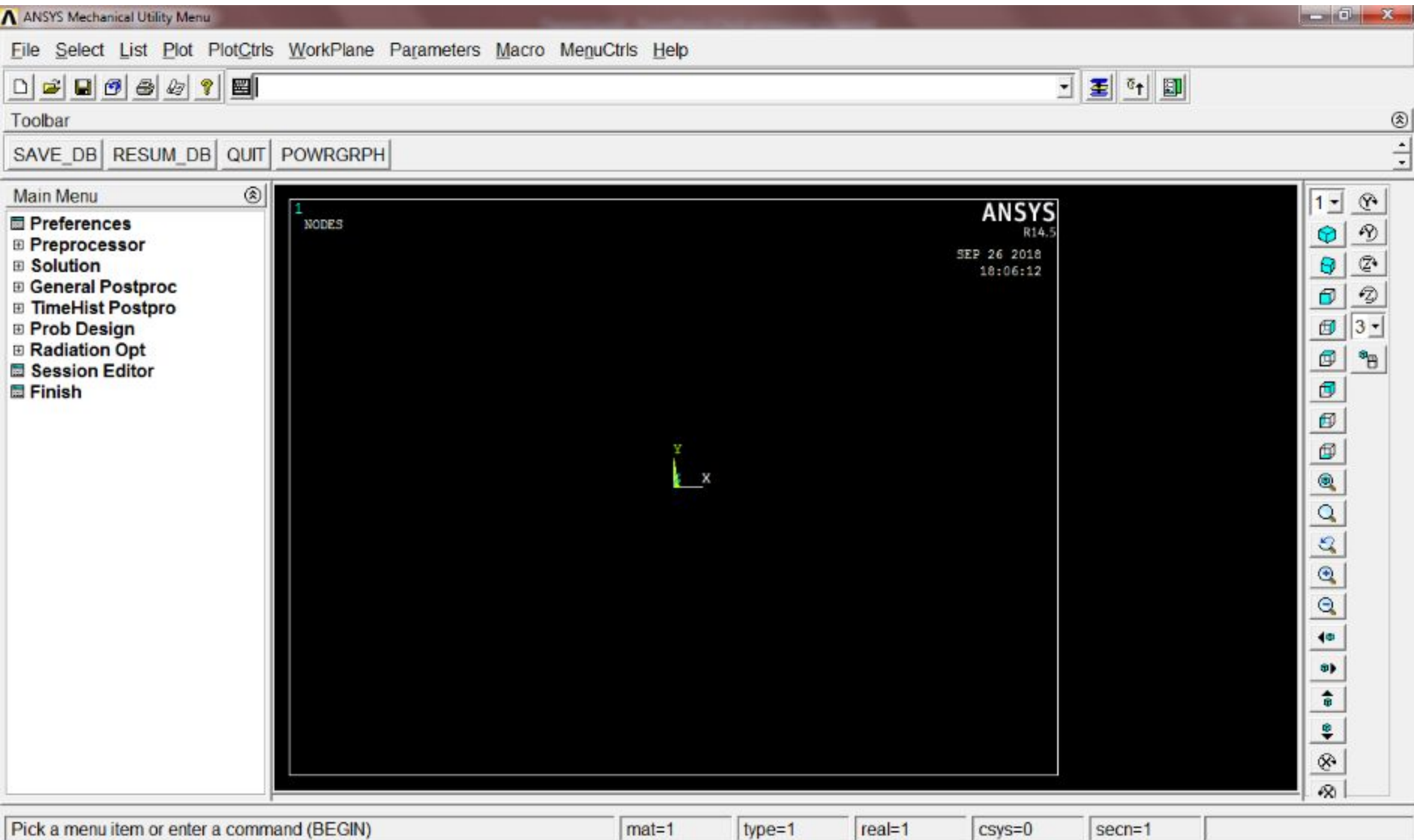


Figure 4.57: Structure B - Configuration.



Figure 4.58: Structure B (Configuration 1) - General View of Structure B in its Bare Condition.



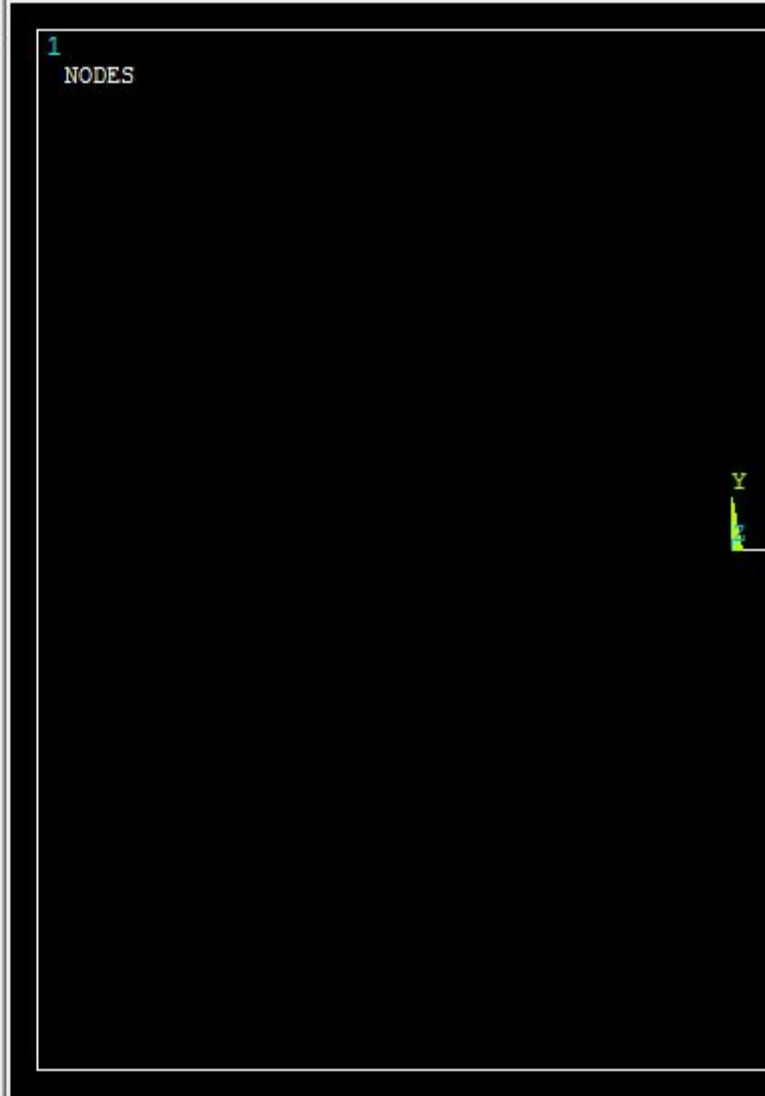


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- Prob Design
- Radiation Opt
- Session Editor
- Finish





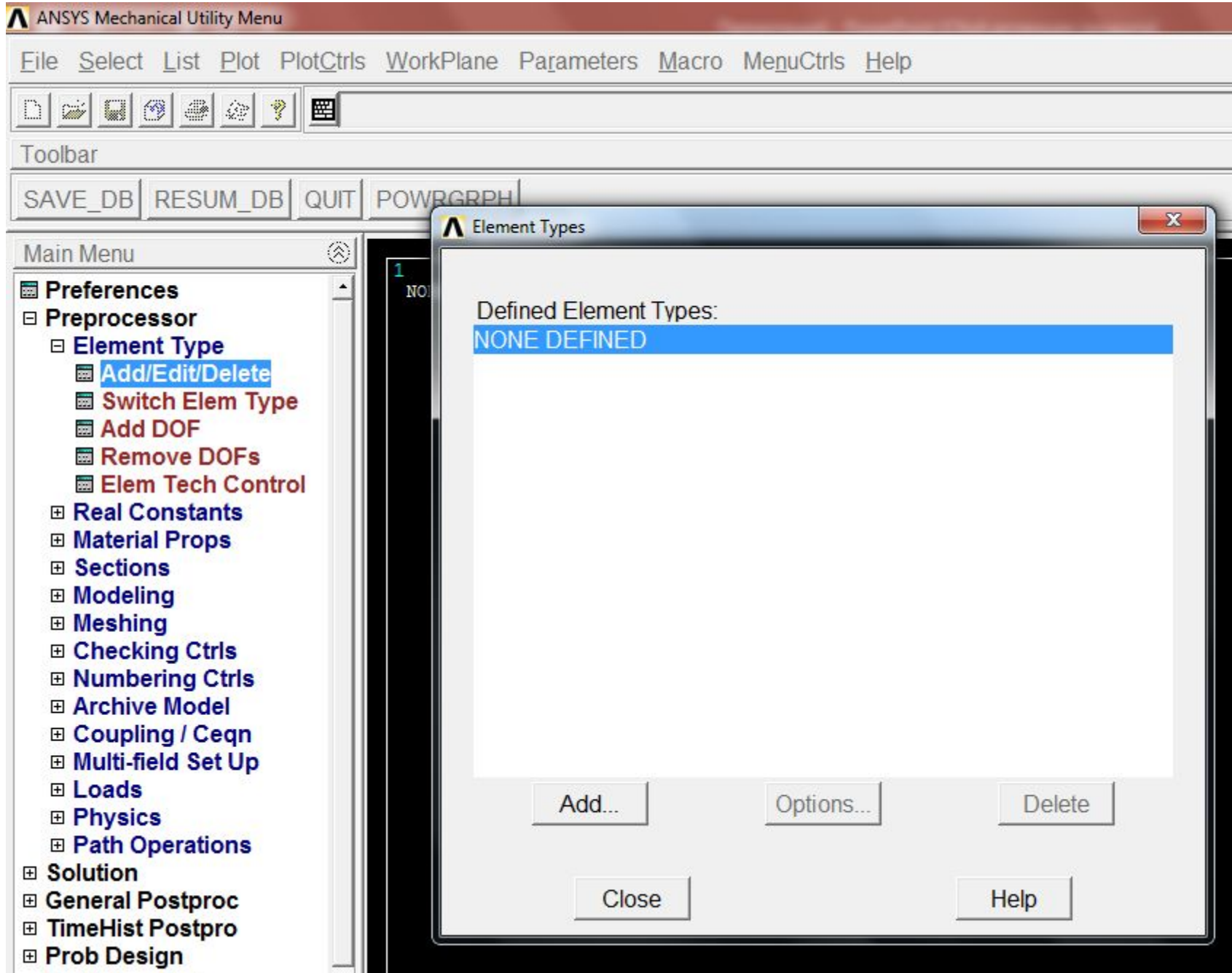
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1 NODES

Real Constants X

Defined Real Constant Sets

NONE DEFINED

Add...
Edit...
Delete

Close
Help



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Define Material Model Behavior

Material Edit Favorite Help

Material Models Defined

- Material Model Number 1

Material Models Available

- Favorites
- Structural
 - Linear
 - Elastic
 - Isotropic
 - Orthotropic
 - Anisotropic
 - Nonlinear
 - Density

Linear Isotropic Properties for Material Number 1

Linear Isotropic Material Properties for Material Number 1

T1

Temperatures	
EX	
PRXY	

Add Temperature Delete Temperature Graph

OK Cancel Help



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 - Common Secti
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 - Taper Sections
 - Plot Section
 - Sect Control
 - NL Generalizer
 - Composite Sec
 - Shell
 - Pretension
 - Joints
 - Reinforcing
 - Pipe
 - Axis
 - Contact
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 - Delete Section
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Beam Tool

ID:

Name:

Sub-Type:

Offset To:

Offset-Y:

Offset-Z:

B:

H:

Nb:

Nh:

File Select List Plot PlotCtrls WorkPlane Parameters Macro MenuCtrls Help



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 - Keypoints
 - Lines
 - Areas
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 - Transducers
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 - SmartSize
 - ManualSize
 - Global
 - Areas
 - Lines
 - All Lines
 - Picked Lines
 - Copy Divs
 - Flip Bias
 - Clr Size
 - Keypoints
 - Layers
 - Concentrat KPs

Element Sizes on All Selected Lines

[LESIZE] Element sizes on all selected lines

SIZE	Element edge length	<input type="text"/>
NDIV	No. of element divisions	<input type="text"/>

(NDIV is used only if SIZE is blank or zero)

KYNDIV	SIZE,NDIV can be changed	<input checked="" type="checkbox"/> Yes
SPACE	Spacing ratio	<input type="text"/>

Show more options No

OK Cancel Help



M_DB QUIT POWRGRPH

1

AREAS

TYPE	NUM
------	-----

ANSYS
R14.5
SEP 26 2018
18:21:04

Mesh Areas

Pick Unpick

Single Box

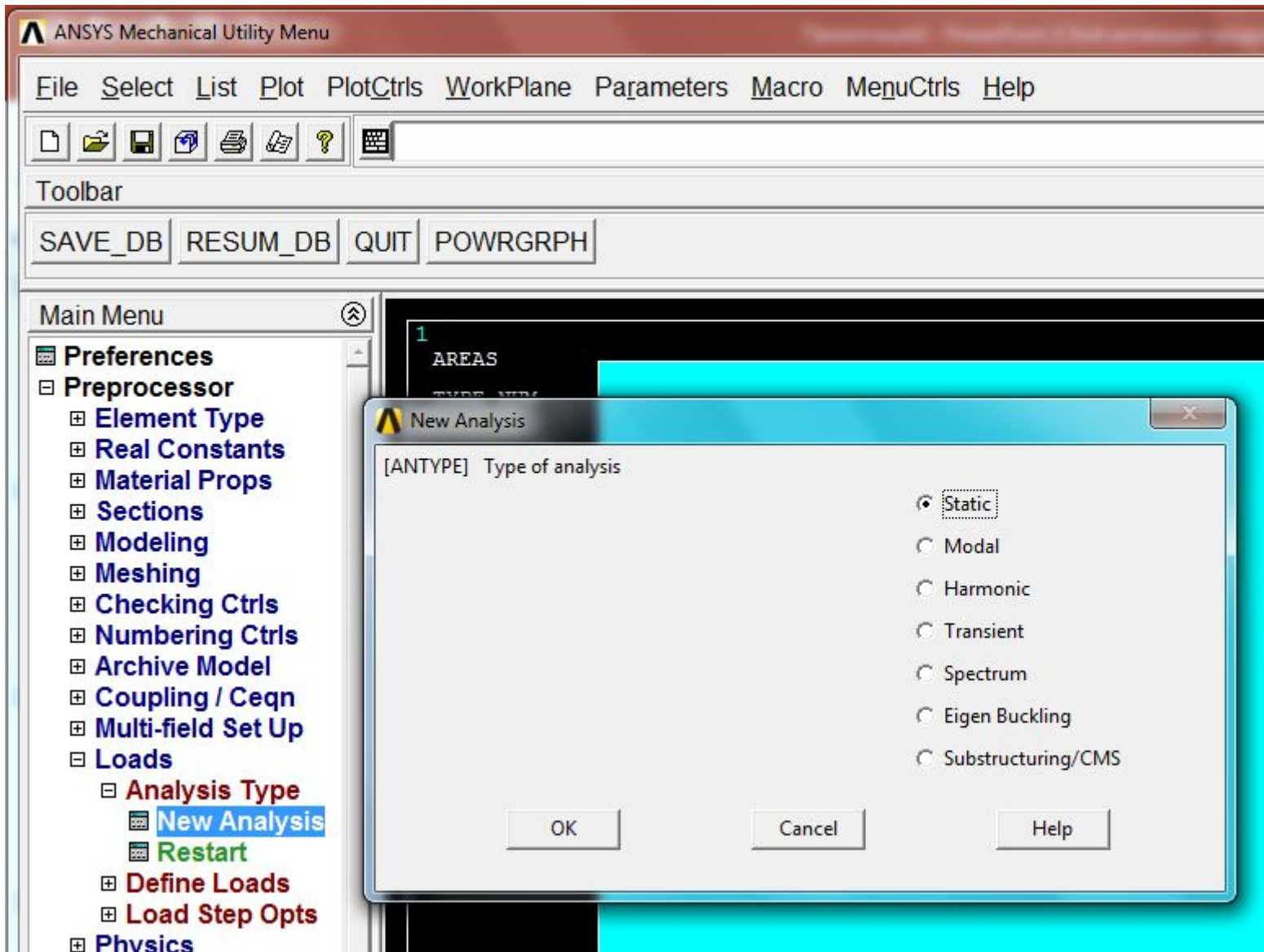
Polygon Circle

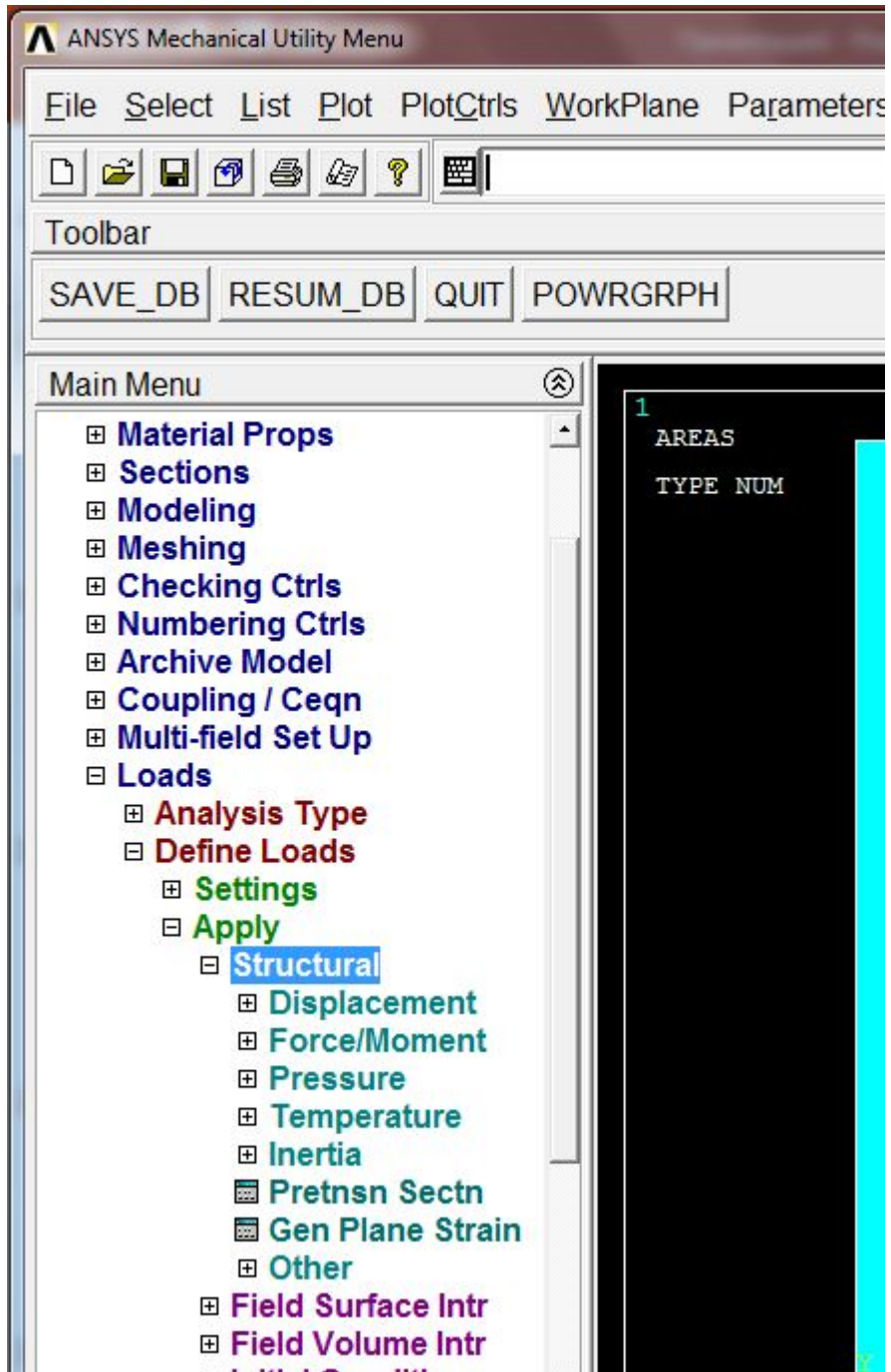
Loop

Count = 0
Maximum = 1
Minimum = 1
Area No. =

List of Items
 Min, Max, Inc

OK Apply
Reset Cancel
Pick All Help





File Select List Plot PlotCtrls WorkPlane Parameters



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1
AREAS
TYPE NUM



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 - Element Solu
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 - Vector Plot
 - Plot Path Item
 - Concrete Plot
 - ThinFilm
 - List Results
 - Query Results
 - Options for Outp
 - Results Viewer
 - Nodal Calcs
 - Element Table
 - Path Operations
 - Surface Operations

Contour Nodal Solution Data

Item to be contoured

- Favorites
- Nodal Solution
 - DOF Solution**
 - X-Component of displacement
 - Y-Component of displacement
 - Z-Component of displacement
 - Displacement vector sum
 - X-Component of rotation
 - Y-Component of rotation
 - Z-Component of rotation
 - Rotation vector sum
 - Stress
 - Total Mechanical Strain
 - Elastic Strain

Undisplaced shape key

Undisplaced shape key

Scale Factor

Additional Options

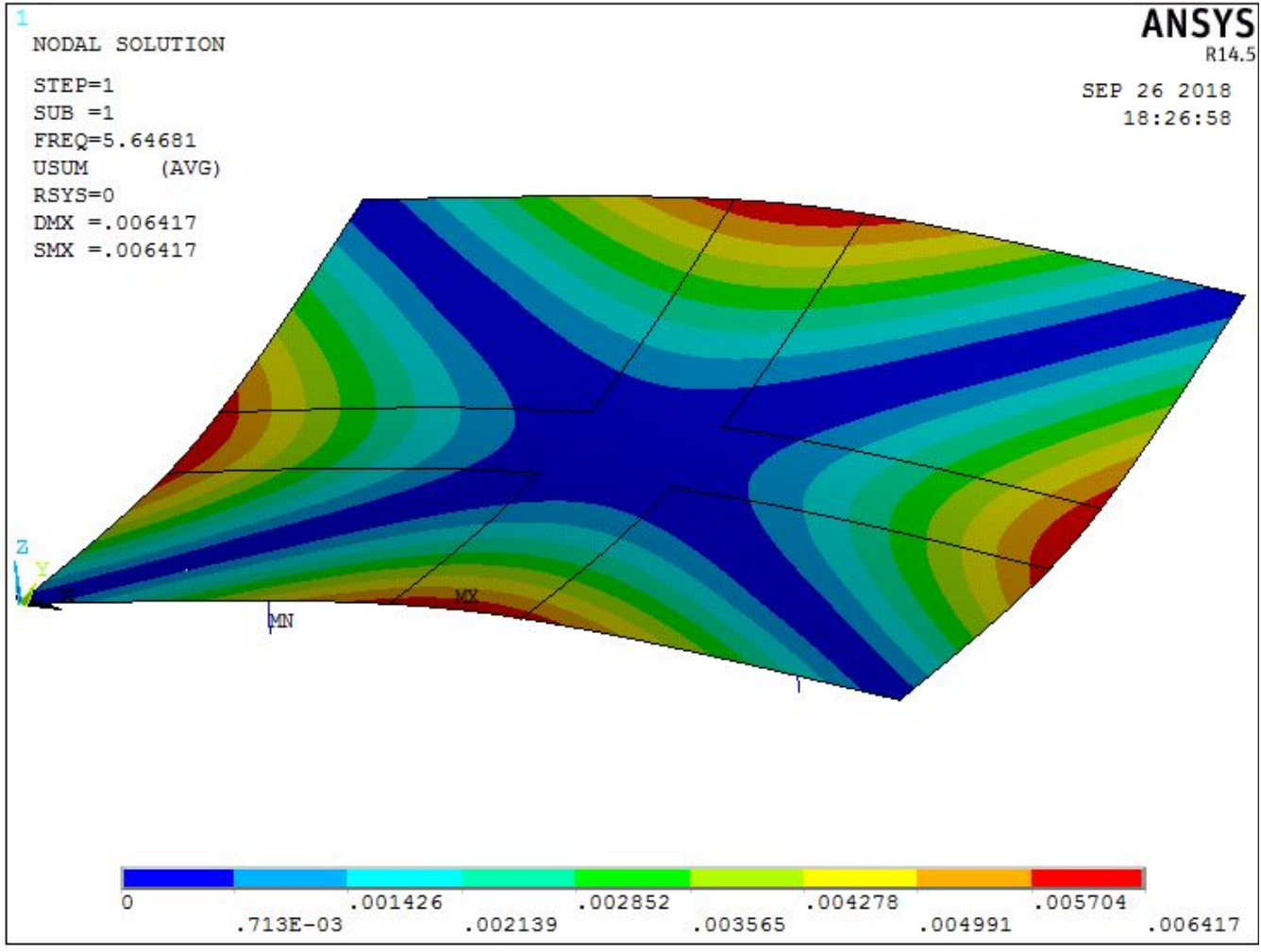
OK



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 - Concrete Plot
 - ThinFilm
 - List Results
 - Query Results
 - Options for Outp
 - Results Viewer
 - Nodal Calcs
 - Element Table
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 - Surface Operations
 - Load Case
 - Check Elem Shape



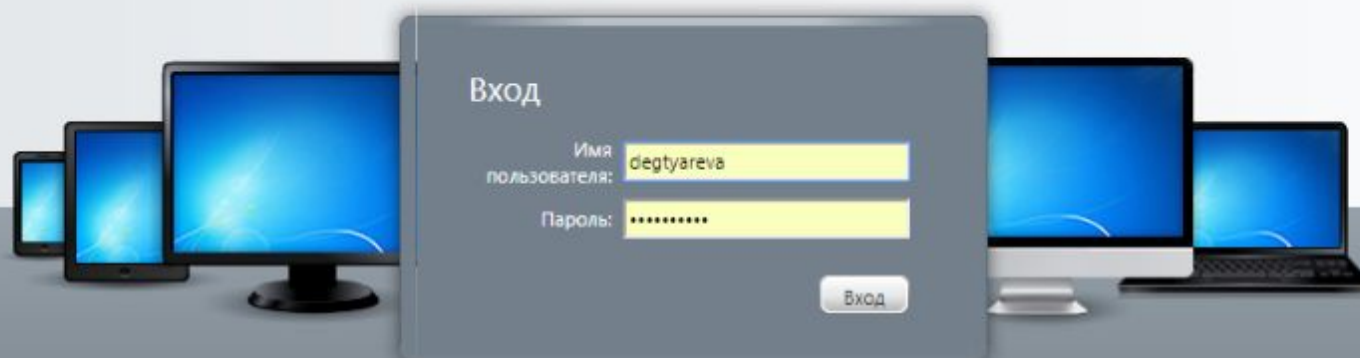
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Linux Desktop

Linux Terminal

Mathcad Prime 4 - 1 лицензия

MATLAB Image Processing

MATLAB R2014b

Microsoft Expression Design 4

Microsoft Expression Web 4

Mozilla Firefox

Notepad++

Opera

Paint

PgAdmin3

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