

## DecaPlot Procedure - Raft:

(Refer Quick Start Guide & Manuals for complete details)

1. Click DecaPlot Control Panel icon
2. Click any where on Welcome Screen
3. If Current Project displayed is not blank, click Export Project Button, select Export Drive & click OK.
4. Copy your staad std & anl file (select files, mouse right click & then copy).  
The staad building file must contain the following lines for raft design:

```
UNIT MET MTON  
LOAD LIST n1 TO n2 (n1 & n2 are load combination nos.)  
PRINT SUPPORT REACTION
```

5. Click Select Design & Drawing Project Button
6. Right click mouse & click Paste any where in the white window.
7. Press Open Button
8. Click combo smiley face
9. Click any where on Welcome Screen
10. Click Extract (second column on Menu Bar)
11. Click Extract R.C.C. Frame Details
12. Select Tabulator option & click OK button
13. Click OK button on status report
14. Click OK on successful extraction message
  
15. Click on Raft (fourth column on Menu Bar)
16. Click Raft Default Parameters under Raft (fourth column on Menu Bar).  
Specify parameters & click OK
17. Click Generate Raft Data File under Raft (fourth column on Menu Bar). Click  
OK on completion of raft data file generation
18. Minimise Decaplot Combo window
19. Run Stadd with Raft Data File (Raft Data File is available in  
C:\DecaPlot\Projects)
  - a. User can modify the generate rectangular raft shape by deleting elements.
  - b. If some elements are deleted by user, ensure the following lines are re-written in staad data file as these get deleted automatically while deleting elements:

```
PRINT ELEMENT INFORMATION  
PRINT SUPPORT REACTION  
PRINT ELEMENT STRESSES
```

20. Click Available Bar Dia under Raft (fourth column on Menu Bar). Specify  
available bar dias. & click OK

21. Click Extract Raft Details under Raft (fourth column on Menu Bar).  
Specify Element Design by DecaPlot is required or not when Element Design window appears.

If design by DecaPlot is opted, specify moments are to be modified or not as per Wood Armer Method when Raft Moments window appears.

22. Click OK when raft extraction completion message appears
23. Click Raft Element Stresses & Design under Raft (fourth column on Menu Bar) to view Raft Results
24. Click Raft Element Design Summary under Raft (fourth column on Menu Bar) to view Raft Design Summary
25. Click Column Position for Raft Punching. Review column position in last column. It can be changed by user if found to be incorrect. Click OK
26. Click Raft Punching Stress under Raft (fourth column on Menu Bar)
27. Click OK when Raft punching stress completion message appears
28. If Error List of Punching Stress is not greyed, click on it to view the error list. If elements are failing, user will be given the option to automatically update the staad raft file to increase the element thickness of failing elements. The thickness is automatically calculated by DecaPlot element design

If some elements have failed & staad raft file has been updated for increased thickness for failing elements, Run Staad again & repeat the above steps from s.no. 19 to s.no. 28.

29. Click Raft Punching Stress Results under Raft (fourth column on Menu Bar) to view punching stress results.
30. Click on Plot Raft Single Line Diagram. Specify scale when prompted for & click OK. Click ok when drawing completion message appears
31. The autocad drawing will automatically be made on screen giving Element Nos. & Top Ast along X, Top Ast along Z, Bottom Ast along X & Bottom Ast along Z.