

```
/OUT,SCRATCH

/PREP7

SMRT,OFF

ANTYPE,STATIC

ET,1,SHELL281          ! 8 NODE LAYERED SHELL

KEYOPT,1,8,1          ! WRITE LAYER RESULTS

SECTYPE,1,SHELL

SECDATA,0.0001,1,0      ! LAYER 1: 0.025 THK, THETA 0
SECDATA,0.0001,1,0      ! LAYER 2: 0.025 THK, THETA 90
SECDATA,0.0001,1,45     ! LAYER 3: 0.025 THK, THETA 90
SECDATA,0.0001,1,45     ! LAYER 4: 0.025 THK, THETA 0
SECDATA,0.0001,1,90     ! LAYER 1: 0.025 THK, THETA 0
SECDATA,0.0001,1,90     ! LAYER 2: 0.025 THK, THETA 90
SECDATA,0.0001,1,-45    ! LAYER 3: 0.025 THK, THETA 90
SECDATA,0.0001,1,-45    ! LAYER 4: 0.025 THK, THETA 0
SECDATA,0.0001,1,-45    ! LAYER 3: 0.025 THK, THETA 90
SECDATA,0.0001,1,-45    ! LAYER 4: 0.025 THK, THETA 0
SECDATA,0.0001,1,90     ! LAYER 1: 0.025 THK, THETA 0
SECDATA,0.0001,1,90     ! LAYER 2: 0.025 THK, THETA 90
SECDATA,0.0001,1,45     ! LAYER 3: 0.025 THK, THETA 90
SECDATA,0.0001,1,45     ! LAYER 4: 0.025 THK, THETA 0
SECDATA,0.0001,1,0      ! LAYER 1: 0.025 THK, THETA 0
SECDATA,0.0001,1,0      ! LAYER 2: 0.025 THK, THETA 90
```

```
MP,EX,1,34.61          ! ORTHOTROPIC MATERIAL PROPERTIES
MP,EY,1,12.34
MP,EZ,1,34.61          ! EZ=EY ASSUMED
MP,GXY,1,4.58
MP,GYZ,1,4.58
MP,GXZ,1,4.58
MP,PRXY,1,0.25         ! MAJOR POISSONS RATIO
MP,PRYZ,1,0.01        ! MAJOR POISSONS RATIO
MP,PRXZ,1,0.25        ! MAJOR POISSONS RATIO
K,1                    ! CORNER KEYPOINTS OF QUADRANT (AREA)
K,2,0.1
K,3,0.1,0.1
K,4,,0.1
A,1,2,3,4
ESIZE,,6              ! 6X6 MESH USING QUARTER SYMMETRY
AMESH,1
NSEL,S,LOC,X,0
DSYM,SYMM,X
NSEL,S,LOC,Y,0
DSYM,SYMM,Y
NSEL,S,LOC,X,0.1      ! APPLY FREELY SUPPORTED B.C.
D,ALL
NSEL,S,LOC,Y,0.1
D,ALL
NSEL,ALL
```

```
SFE,ALL,2,PRES,,50000          ! APPLY UNIFORM PRESSURE
OUTPR,NSOL,1
OUTPR,RSOL,1
FINISH
/SOLU
SOLVE
FINISH
/OUT
/POST1
NSEL,S,LOC,X                    ! SELECT CENTER NODE
NSEL,R,LOC,Y
PRNSOL,U,Z                      ! PRINT CENTER DEFLECTION
```