Table A20 List of the file, **walltemplate.src.**
This file is part of the STAGS software written
by the authors of STAGS (Charles Rankin, et al).
**This "template", or "skeletal" version of SUBROUTINE WALL must be "fleshed out" by the STAGS user for any case in which the wall thickness varies over the surface of a shell. "Fleshed out" versions of SUBROUTINE WALL for elastic and for elastic-plastic material are listed in the next two tables. A "fleshed out" version of SUBROUTINE WALL for the STAGS 180-degree "soccerball" model with elastic-plastic material is listed in Table a32.**

```
c=deck    wall
c=purpose User-written WALL subroutine
c=version May 2002

#include "keydefs.h"

#if   _usage_
*
*     calling sequence: call WALL ( iunit, ielt, kelt, XYZg, XYs,
*                                   zeta,  ecz,  ilin, iplas )
*
*     Input Arguments:
*     ================
*     iunit = unit number
*     ielt  = local element number (in unit iunit)
*     kelt  = element type code
*     XYZg  = {x,y,z} global coordinates
*     XYs   = {s,t} surface coordinates (shell unit, only)
*
*     Output Arguments:
*     =================
*     zeta  = zeta (see M-5 or T-3 for details)
*     ecz   = eccentricity (see M-5 or T-3 for details)
*     ilin  = nonlinearity flag
*     iplas = plasticity flag
*
#endif

************************************************************************
            subroutine WALL ( iunit, ielt, kelt, XYZg, XYs,
     &                        zeta,  ecz,  ilin, iplas )
************************************************************************

      _implicit_none_
```

```
 Integer    iunit
 Integer    ielt
 Integer    kelt
 Integer    ilin
 Integer    iplas
 Real       XYZg(3)
 Real       XYs(2)
 Real       zeta
 Real       ecz

 Integer         maxLAY
 PARAMETER     ( maxLAY = 100 )

 Integer         maxSM
 PARAMETER     ( maxSM  = 6 )

 Integer         nit,  not
 common /nitnot/ nit,  not

 Integer         itaw, kwall, nlay, nlip, nsmrs
 common /WALLX / itaw, kwall, nlay, nlip, nsmrs

 Integer         matL (maxLAY)
 Real            tL   (maxLAY)
 Real            zetL (maxLAY)
 Integer         lsoL (maxLAY)
 Real            e1L  (maxLAY)
 Real            u12L (maxLAY)
 Real            gL   (maxLAY)
 Real            rhoL (maxLAY)
 Real            a1L  (maxLAY)
 Real            e2L  (maxLAY)
 Real            a2L  (maxLAY)
 common /WALL1 / matL, tL,   zetL, lsoL, e1L, u12L,
&                gL,   rhoL, a1L,  e2L,  a2L

 Integer         matF, matM
 Real            ttL   (maxLAY)
 Real            xxL   (maxLAY)
 Real            zetwL (maxLAY)
 Real            oL    (maxLAY)
 Real            eF,   uF,   rhoF,  alF
 Real            eM,   uM,   rhoM,  alM
 common /WALL2 / matF, matM,
&                ttL,  xxL,  zetwL, oL,
&                eF,   uF,   rhoF,  alF,
&                eM,   uM,   rhoM,  alM
```

```
      Integer         matC, matS
      Real            ct,   cc,   ch,   cd,   cb
      Real            ts,   phi,  anc
      Real            eC,   uC,   rhoC, alC
      Real            eS,   uS,   rhoS, alS
      common /WALL3 / matC, matS,
     &                ct,   cc,   ch,   cd,   cb,
     &                ts,   phi,  anc,
     &                eC,   uC,   rhoC, alC,
     &                eS,   uS,   rhoS, alS

      Integer         ta,   mat,  itvs, idumt
      Real            ccc,        cts
      common /WALL4 / ta,   mat,  itvs, idumt,
     &                ccc(6,6),   cts(2,2)

      Integer         icroSM (maxSM)
      Real            spaSM  (maxSM)
      Real            zetSM  (maxSM)
      Real            xsiSM  (maxSM)
      Real            eczSM  (maxSM)
      common /SMEAR / icroSM, spaSM, zetSM, xsiSM, eczSM

      write (not,900)
      stop

  900 format (//' SUBROUTINE WALL HAS NOT BEEN PROVIDED.')

      end
=============================================================
```