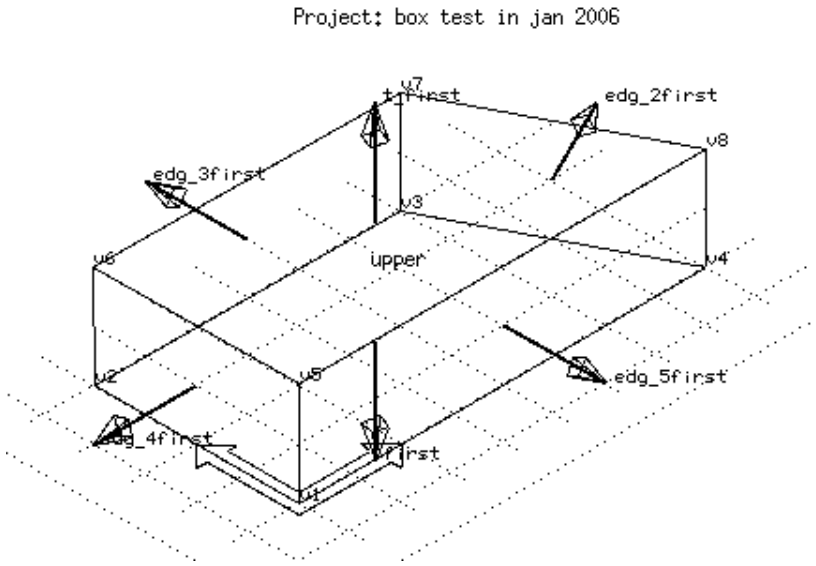
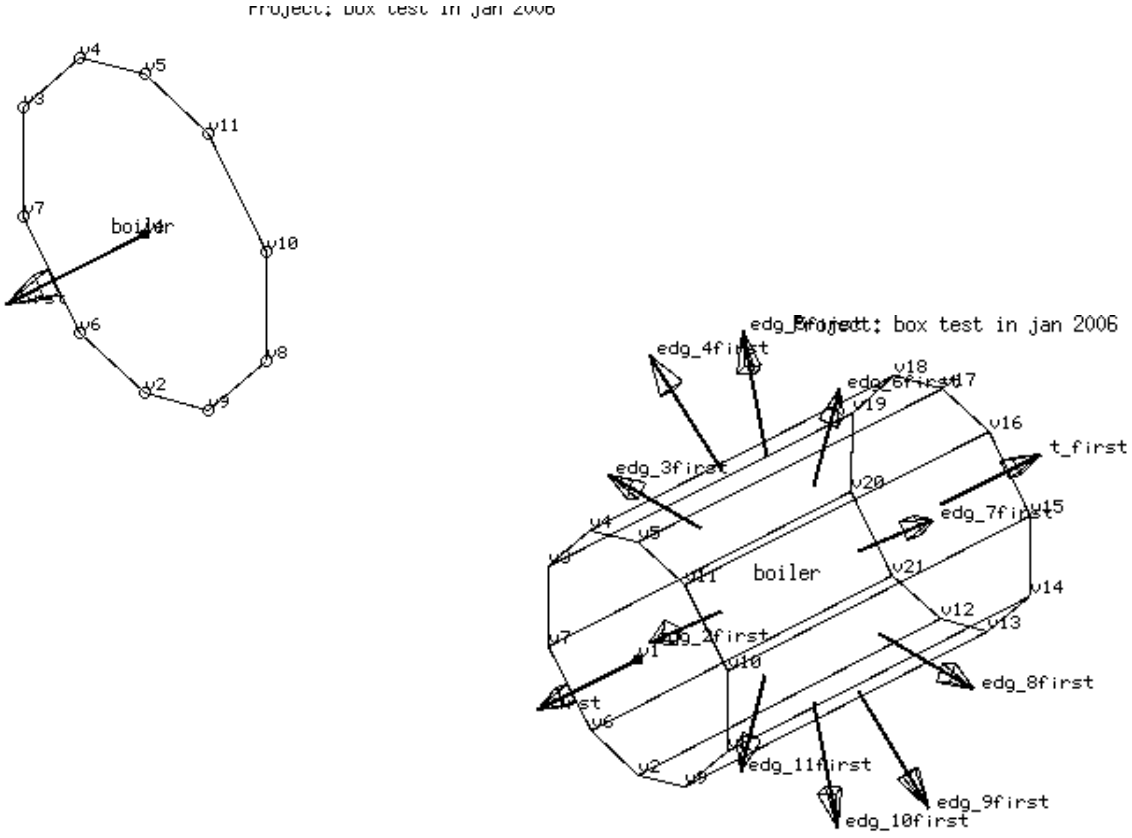
New ESP-r facility in production

This is a brief note about a new geometry facility that is being tested for ESP-r which may be useful in particular projects. ESP-r has traditionally offered a floor plan extrusion, but what if you already have a surface which has all of the points needed for an extrusion (e.g. the ceiling of the zone below) and the new facility allows you to extrude along the surface normal to create an enclosure (see the figure below).



And there are some rooms where the complexity is not in the floor plan and what you really want is to be able to extrude perpendicular to an existing surface. The boiler housing below started from a single surface (upper left in the figure below) and was extruded and name / construction attributed in about a minute.



The extrusions show above were made in the opposite direction of the surface normal of the original surface. The base surface faced down and the initial circle surface faced to the left. If the extrusion is in the direction of the surface normal an enclosure with all surfaces facing in would be created. Where would this be useful? How about for a zone within a zone?

Currently I am debating whether the interface should pause at each new surface and ask for its construction individually or to do this by nominating a single construction type for all of the edge surfaces of the enclosure. If you have an opinion let me know.

This facility is not in time for the public release that will be made “any day now” but it should be in the developers branch in the near future. Such 'wish we had a...' issues tend to arise in consulting projects and in this case the time taken in creating the facility is about equal to the time its use will save on an upcoming project.

-Jon Hand