

PHRC Report #D9: Computer-Aided Design for the Residential Builder

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Author(s): C. McIntyre

BACKGROUND:

Computer-Aided Design for the Residential Builder is the actual CAD workshop reference manual which is provided to participants of the hands-on workshop entitled Computer-Aided Design for the Residential Builder. This phase of the research effort is focused on the needs of residential builders in their desire to stay current with computer applications in their industry and to incorporate these technologies into their business operations.

OBJECTIVES:

An important component of any research effort is technology transfer. The *Computer-Aided Design for the Residential Builder* workshop is a direct result of that aspect on university-based research. This project represents a joint-venture of the PHRC, the National Association of Home Builders, the Pennsylvania Builders Association, local Home Builders Associations, and Penn State University at University Park and various Commonwealth Campus locations in response to the expressed needs of the residential building industry. This project addresses the primary need to develop a technology transfer program which focuses on the practical applications of CAD.

WHAT IT MEANS TO YOU:

The workshop represents the Technology Transfer component of the CAD research as related to the residential building industry. As part of this research work, the PHRC has reviewed several CAD software programs developed specifically for the residential builder. The software programs were evaluated on their functionality, ease of use, and cost. The software programs demonstrated in the workshop represent cost effective solutions for individuals and firms that are attempting to learn and integrate CAD into their profession. This workshop is not meant to endorse any particular product, but is meant to give the workshop participants the skills and confidence to properly select and use CAD software programs.

The *Computer-Aided Design for the Residential Builder* workshop manual is the actual workbook which is provided to participants of the hands-on-workshop. The manual provides a step-by-step explanation of the use of the software programs, as well as a guide to system selection, system requirements, and training strategies.

WHAT'S NEXT?

The research efforts of the PHRC concerning this project have established the PHRC as a primary source of information with regard to CAD applications within the residential building industry. In addition, the

technology transfer component of this project has gained some national recognition. NAHB requested that the *Computer-Aided Design for the Residential Builder* workshop be included as one of the programs offered at the Interactive Computer Lab at the Builders' Show Houston, Texas on January 25, 1996. In addition, the Journal of Light Construction requested that the workshop be offered as a full-day technology transfer course at their Construction and Business Technology Conference in Marlborough, Massachusetts on February 15, 1996. The PHRC has honored both of these requests.