



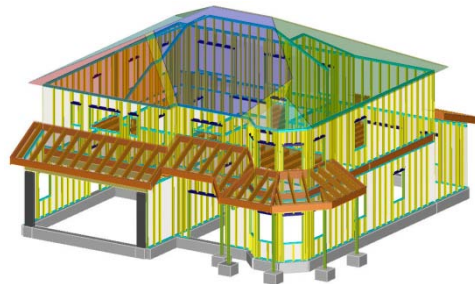
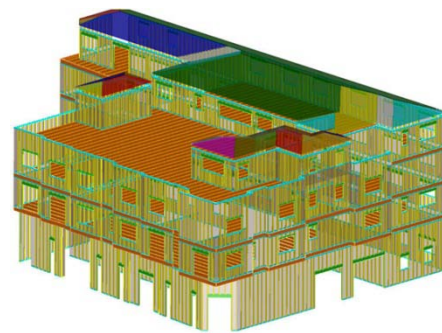
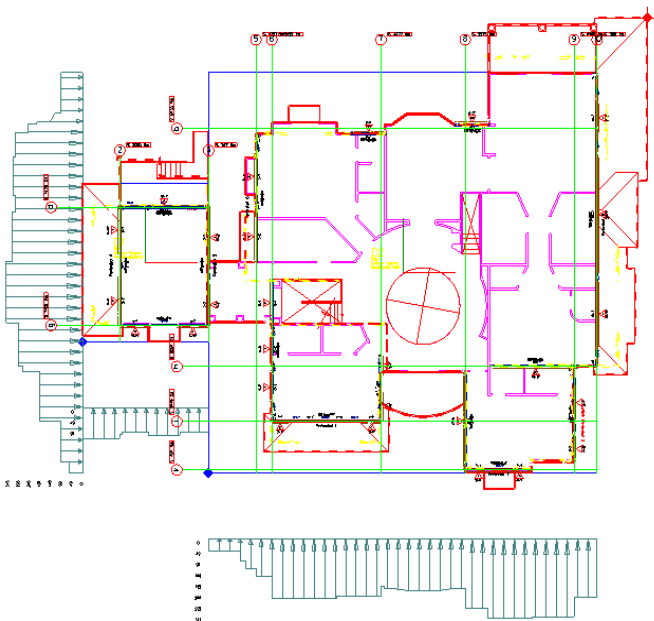
**Structural Soft**  
INTELLIGENT BUILDING DESIGN

# Lateral Design Fast & Simple

Engineering Software Solution  
for Wood Buildings

**Lateral** 2010  
**Worx**

Seismic Load ■ Wind Load ■ Shear Wall Design



Commercial ■ Residential

www.structuralsoft.com

## GENERAL

- Simple, easy to use and intuitive approach to lateral design.
- Input wall layouts quickly; no Finite Element experience and modeling is necessary.
- Generates shear wall layouts and schedules once design is complete. No discrepancies!

## DESIGN OPTIONS

- Design segmented shear walls with variable plate height in the same floor.
- Design perforated walls, shear walls with shear transfer around openings and pre-manufactured shear panels.
- Users can define/edit hardware and shear wall types in multiple schedules.
- Design diaphragm nailing and calculation of chord forces (including variable depth and diaphragm openings).
- Cumulative uplift calculation and automatic hold-down selection (including detection of discontinuities at headers).

## USER INTERFACE

- Familiar CAD tools for quick modeling and editing of walls, diaphragms and other MLFRS.
- Automatic generation and update of perimeter walls, shear line grid, wall ID, etc.
- Display of wind and seismic load distribution and shear line reactions.
- Display of diaphragm forces due to discontinued shear walls.
- Display of diaphragm shear and moment diagrams.

## DRAWINGS

- Import architectural CAD drawings and control layer settings.
- Vertical alignment of imported fragmented architectural floors.
- Export of shear wall layouts with all hardware and indicators.
- Export of shear wall and tie-down schedules.
- Generation of key plan of shear walls complete with panel ID and end posts.

## LOADS

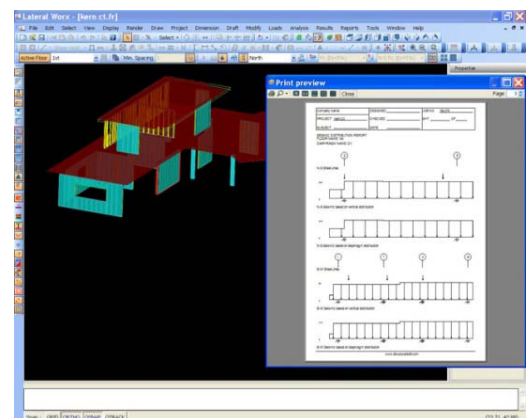
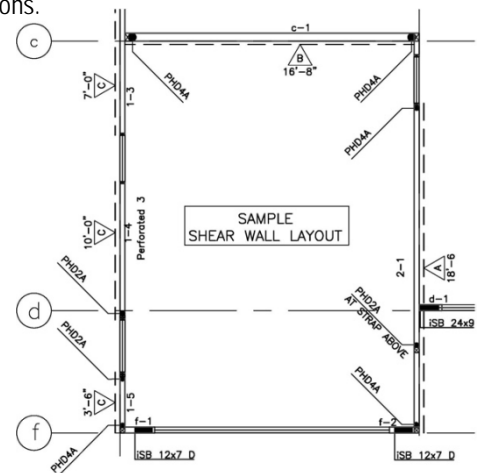
- Automatic calculation of code lateral forces (wind and seismic).
- Editing of wind distribution to model complicated roof lines.
- Generation and application of windward and leeward wind forces separately as required to model floors with multiple diaphragms and multiple plate heights.

## MODELING AND ANALYSIS OPTIONS

- Modeling of multiple diaphragms within the same floor to model different plate heights and partially connected diaphragms (i.e. large openings).
- Automatic detection of unsupported uplift loads.
- Automatic detection of vertical and horizontal offsets in the lateral system.
- Modeling of walls with small horizontal offset as a single shear line.
- Provisions for modeling of additions to existing buildings.
- Options to model skewed walls.
- Allow using different "R" values for shear lines.

## CALCULATIONS REPORT

- Comprehensive reporting of analysis results for quality control and plan check review.
- Complete reporting of design with reference to applicable code sections.
- Export report in MS Excel and Word formats.



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