



SVAIR^{GE}
1D / 2D / 3D FINITE ELEMENT
PORE-AIR FLOW MODELING



SOILVISION
SOILVISION SYSTEMS LTD.
128 - 502 WELLMAN CRESCENT, SASKATOON, SK. S7T 0J1 CANADA
TEL: +01.306.477.3324 / FAX: +01.306.955.4575
SOILVISION.COM / CONTACT@SOILVISION.COM

FEATURE COMPARISON				
PRODUCT VERSION	STUDENT	CLASSROOM	STANDARD	PRO
General				
Verification, Tutorial, and Example Manuals with Corresponding Models Provided	Yes	Yes	Yes	Yes
Create/Edit Models	Yes	Yes	Yes	Yes
CAD Windows Interface	Yes	Yes	Yes	Yes
Integrated Help System	Yes	Yes	Yes	Yes
Batch Analysis of Groups of Models	Yes	Yes	Yes	Yes
Windows 7, 8 and 10 Compatible	Yes	Yes	Yes	Yes
Multi-Core CPUs, Multi-Threading & 64 bit Environments Supported	Yes	Yes	Yes	Yes
Licensed for Engineering Consulting Use (Commercial Licenses Only)			Yes	Yes
Geometry				
Number of Regions	10	Unlimited	Unlimited	Unlimited
Number of Materials	3	Unlimited	Unlimited	Unlimited
Number of 3D Surfaces	3	Unlimited	Unlimited	Unlimited
Finite Element Cells ¹	Limited ¹	Limited ¹	Unlimited	Unlimited
Import Regions from AutoCAD™ DXF Files		Yes	Yes	Yes
Import of Shape Files (SHP)		Yes	Yes	Yes
Import of ESRI ASCII Grid Files		Yes	Yes	Yes
Pinch Out Surfaces (3D)	Yes	Yes	Yes	Yes
Slice 3D Models to 2D Cross Section	Yes	Yes	Yes	Yes
Coordinate Systems				
1D Analysis	Yes	Yes	Yes	Yes
2D Analysis	Yes	Yes	Yes	Yes
3D Analysis	Yes	Yes	Yes	Yes
Axisymmetric Analysis		Yes	Yes	Yes
Plan View		Yes	Yes	Yes
Anisotropy		Yes	Yes	Yes
Temporal				
Steady-State	Yes	Yes	Yes	Yes
Transient		Yes	Yes	Yes
Initial Conditions				
Other SVAIR™ Analysis	Yes	Yes	Yes	Yes
Constant/Equation	Yes	Yes	Yes	Yes
Assign Initial Conditions by Region	Yes	Yes	Yes	Yes
Application Types				
Vapor Extraction	Yes	Yes	Yes	Yes
Air Intrusion	Yes	Yes	Yes	Yes
Mesh				
Fully-Automatic Generation	Yes	Yes	Yes	Yes
Fully-Automatic Mesh Refinement	Yes	Yes	Yes	Yes
Equation Solvers				
Galerkin Finite Element Method	Yes	Yes	Yes	Yes
Parallel Processor Support	Yes	Yes	Yes	Yes
Full coupling				
Water				Yes
Thermal Convection				Yes
3 way Air / Water / Thermal				Yes
Material Property Functions				
Air Conductivity Function	Yes	Yes	Yes	Yes
Volumetric Air Content Function	Yes	Yes	Yes	Yes

¹ Student / Classroom editions are limited to 100 cells in 1D, 400 cells in 2D and 1200 cells in 3D.