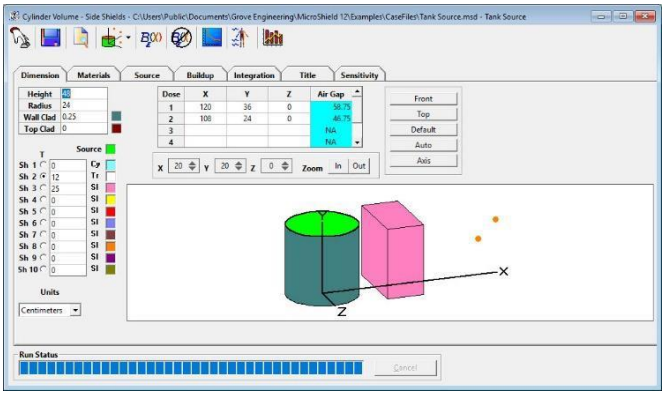
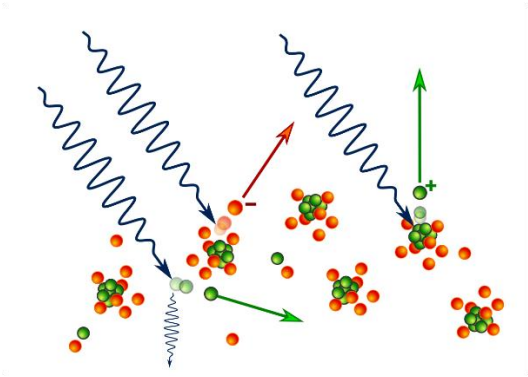
MicroShield® Version 13

MicroShield® is a comprehensive photon/gamma ray shielding and dose assessment program. It is widely used for designing shields, estimating source strength from radiation measurements, minimizing exposure to people, and teaching shielding principles.



MicroShield® is useful to health physicists, engineers, scientists, technicians, among others. One of the primary advantages of this software is that it only requires a basic knowledge of radiation and shielding principles.

There are two different options for the MicroShield® software: MicroShield® Pro and MicroShield® LT.



MicroShield® is a powerful, cost-effective method for performing dose and shielding calculations for gamma and x-rays.

Both versions of MicroShield® included the world-renowned photon/gamma ray shielding and dose assessment program. The MicroShield® software has been trusted by the international nuclear community for over 35 years.

MicroShield® Pro provides the full features of the MicroShield® software along with the various source, decay, and other dose assessment tools. MicroShield® LT provides the fundamental 3D solution algorithm along with the basic features. MicroShield® Pro integrated tools provide graphing of results, material and source file creation, source inference with decay (dose-to-Ci calculations accounting for decay and daughter buildup), projection of dose rates versus time as a result of decay, access to material and nuclear data, and decay heat calculations.

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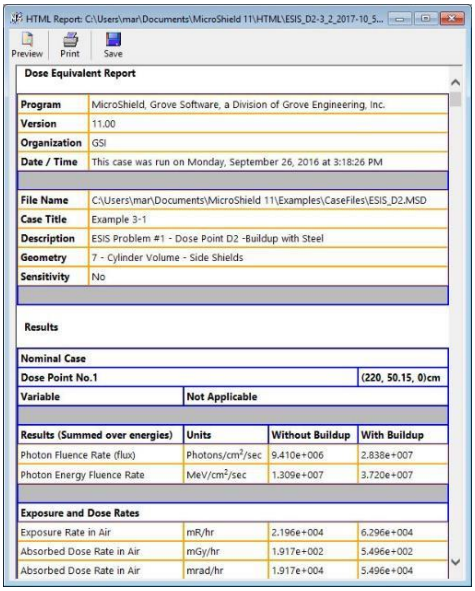
MicroShield® Version 13

The latest version of MicroShield® improves the computational speeds of the calculations performed as well as:

- Improved computational algorithms including the addition of updated National Institute of Standards and Technology (NIST) mass attenuation factors [Hubbell, J.H. and Seltzer, S.M. (2004)].
- Added functionality to set a fixed air gap for each dose point.
- Enlargement of the Custom Material Library to include more than 30 new custom materials, bringing the library to over 100 materials.
- Inclusion of dose conversion factors from ICRP-21 as well as ANSI/ANS 6.1.1-1991 and 2020.
- Full compatibility with the latest updates to Microsoft Windows® 10 and 11.



As always, MicroShield® comes with all the required reference data needed to model and execute many shielding and dose assessment problems.

MicroShield® utilizes the state-of-the-art nuclear libraries and data from around the world.

MicroShield® automatically calculates over 100 dose conversion factors and provides them in an easy-to-read Dose Equivalent Report.

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MicroShield® Version 13

Here are some of MicroShield's® specific features:

- Fully compatible with Microsoft Windows® 10 and 11
- Ability to export results into Microsoft Office® applications.
- Ability to utilize international numerical formats (decimal commas, etc.).
- Current industry standard dose conversion factors including ICRP-116, ICRP-74, ICRP-51, ICPR-21 as well as ANSI/ANS-6.1.1.
- Sixteen geometries that accommodate offset dose points and as many as ten standard shields plus source self-shielding and cylinder cladding.
- The geometry display for entry is re-scaled as dimensions are entered. Dimensional data are accepted in meters, centimeters, feet, or inches.
- Library data (radionuclides, attenuation, buildup, and dose conversion) reflect standard data from industry standard radiation libraries ICRP-38 and ICRP-107 as well as ANSI/ANS standards and RSICC publications.
- Buildup and uncollided results are both automatically and simultaneously calculated.
- Sources may be created and saved and moved among cases (either as nuclides or energies) and as concentrations or totals. Several photon grouping methods are provided including custom (user defined) grouping methods.
- Source decay can be calculated with daughter products generated using the same algorithms as found in the RadDecay® software

MicroShield® v13 is compatible with Microsoft Windows® 10 and 11. Complete installation may require up to 30MB of hard disk space.

License Types: Subscription licenses which permit installation as a Single User, Local Area Site License, or Wide Area Site License.

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