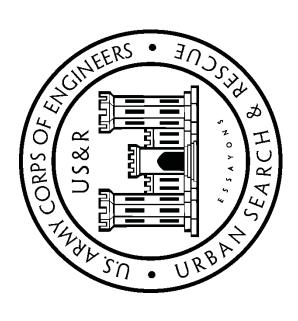
U.S. Army Corps of Engineers Urban Search and Rescue Program

Urban Search & Rescue

SHORING OPERATIONS GUIDE

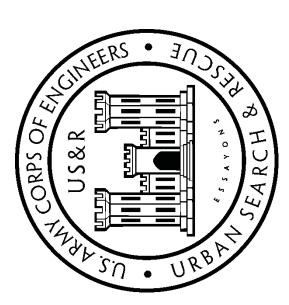


Edition 4.1 July 2016

U.S. Army Corps of Engineers Urban Search and Rescue Program

Urban Search & Rescue

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US&R SHORING OPERATIONS GUIDE (SOG)

FOREWORD

This Shoring Operations Guide (SOG) was developed by the FEMA US&R Structures Sub-group, in cooperation with U.S. Army Corps of Engineers, US&R Program Office, as a working reference tool for US&R Rescue Team Personnel during response operations. It condenses information provided during the initial training, and was designed to be expanded in order to incorporate new information. In this SOG, Sections 1 through 4 are nearly identical to the same sections of the larger and more comprehensive USACE Structures Specialist Field Operations Guide (FOG). That StS FOG has additional Operational Check Lists, Engineering Data, Tables and Forms that make it a more useful reference for the Structures Specialist. This SOG has, in Section 4, incorporated some of the most useful tables from the StS FOG, and a new Section R has been added at the end.

The new Sect R has the most useful information from the Rescue Operations Guide (ROG) that was developed from 2003 to 2006. The ROG was and is a compilation and summary of important strategic and tactical information, developed procedures, and reference material specifically for the performance of Rescue Operations.

Users of this guide are encouraged to suggest changes that can be incorporated into future editions of this SOG. (The current plan is to release a newly revised edition of the SOG every two years in July) Suggestions should be made to:

Disasterengineer.org

e-mail: admin@disasterengineer.org

This Publication is intended for the use of US&R Structures Specialists and Rescue Team Personnel. It may be printed by them, or their organizations, for their use.

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multiply by	25.4 2.5.4 0.0254 0.3048 914.4 0.9144 1.609 6.452 0.0929 0.8361 2.59 0.4047 0.016387 0.016387 0.016387 0.028317 0.0028317 0.003785 3.785 5.0 15.0 0.047 0.054 0.054 0.05835 0.0048 28.35 0.002835	0.9072 1016.0 1.0160
<u>into</u>	mm cm meters meters km meters km cm² km² km² cm³ liters m³ cm³ ml ml ml ml ml ml ml kg grams grams kg kg	tons (metric) kg tons (metric)
ENGLISH TO METRIC To convert	inches inches inches inches inches inches inches feet yards wards miles square inches square feet square feet square miles acres volumes cubic inches cubic feet cubic feet cubic feet cubic feet cubic yards squares (U.S.A.) gallons (U.S.A.) gallons (U.S.A.) gallons (U.S.A.) gallons (U.S.A.) gallons (U.S.A.) gallons (U.S.A.) teaspoons fluid ounces cups pints grains ounces pounds pounds tons (U.S.A.)	tons (U.S.A.) tons (long) tons (long)

multiply by	25.4	2.54	0.0254	0.3048	914.4	0.9144	600:-	6.452	0.0929	0.8361	2.59	0.4047		16.387	0.016387	0.028317	28.317	0.7646	29.57	0.003785	3.785	5.0	15.0	30.0	0.24	74.0	C.8.0	0.0648	28.35	0.02835	0.4536	0.000454	907.2	10.8072	1.0160
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ENGLISH TO METRIC To convert	Lengths inches	inches	inches	teet	yards	yards	Surfaces	square inches	square feet	square yards	square miles	acres	Volumes	cubic inches	cubic inches	cubic feet	cubic feet	cubic yards	liquid ounces	gallons (U.S.A.)	gallons (U.S.A.)	teaspoons	tablespoons	fluid onnces	cnbs	pints	quarts Weights	grains	onuces	onuces	spunod	spunod	tons (U.S.A.)	tons (U.S.A.)	tons (long)

