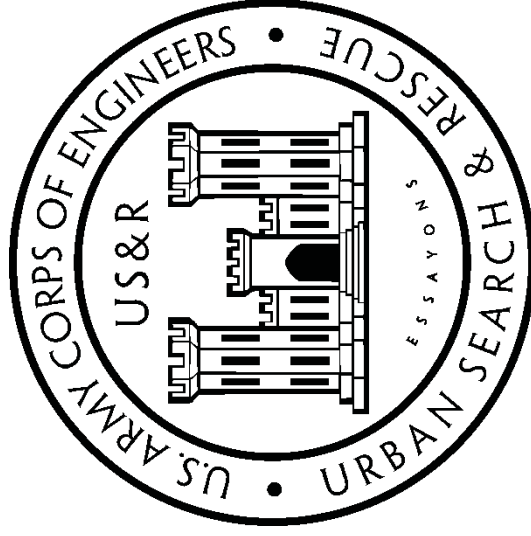


U.S. Army Corps of Engineers
Urban Search and Rescue Program

Urban Search & Rescue

SHORING OPERATIONS GUIDE

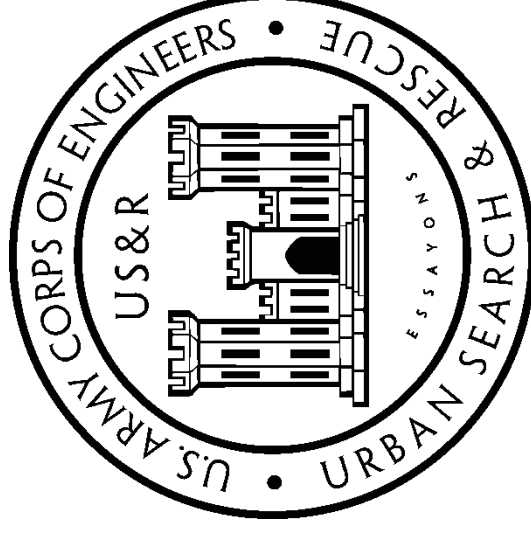


3rd Edition, 3rd Printing
June 2013

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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 SIS 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 SIS FOG.

Users are encouraged to suggest changes that can be incorporated into future editions of this SOG. Suggestions should be made to:

Disasterengineer.org

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ENGLISH TO METRIC

<u>To convert</u>	<u>into</u>	<u>multiply by</u>
Lengths		
inches	mm	25.4
inches	cm	2.54
inches	meters	0.0254
feet	meters	0.3048
yards	km	914.4
yards	meters	0.9144
miles	km	1.609
Surfaces		
square inches	cm ²	6.452
square feet	m ²	0.0929
square yards	m ²	0.8361
square miles	km ²	2.59
acres	hectares	0.4047
Volumes		
cubic inches	cm ³	16.387
cubic inches	liters	0.016387
cubic feet	m ³	0.028317
cubic feet	liters	28.317
cubic yards	m ³	0.7646
liquid ounces	cm ³	29.57
gallons (U.S.A.)	m ³	0.003785
gallons (U.S.A.)	liters	3.785
teaspoons	ml	5.0
tablespoons	ml	15.0
fluid ounces	ml	30.0
cups	liters	0.24
pints	liters	0.47
quarts	liters	0.95
Weights		
grains	grams	0.0648
ounces	grams	28.35
ounces	kg	0.02835
pounds	kg	0.4536
pounds	tons (metric)	0.000454
tons (U.S.A.)	kg	907.2
tons (U.S.A.)	tons (metric)	0.9072
tons (long)	kg	1016.0
tons (long)	tons (metric)	1.0160

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