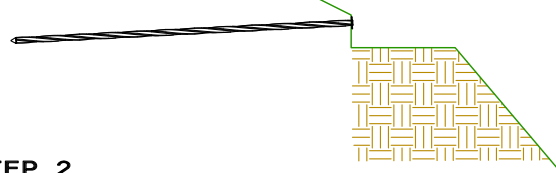
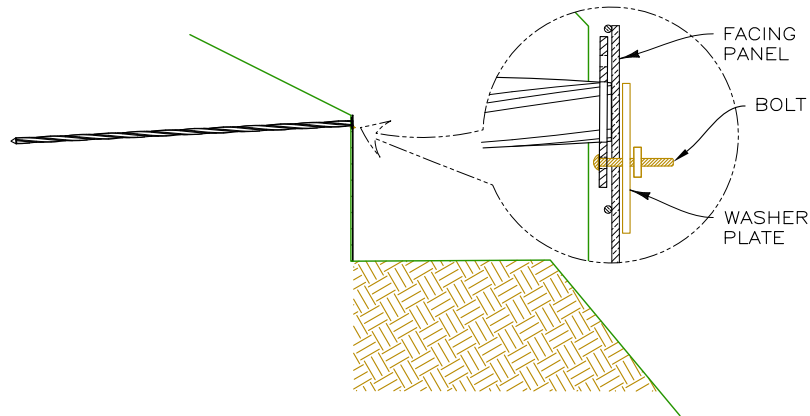


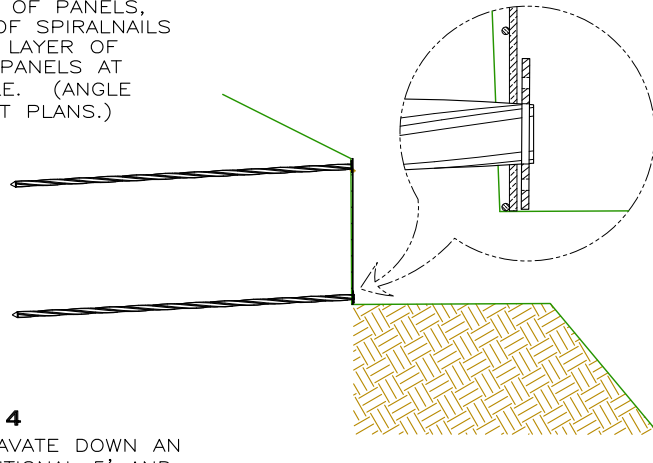
**STEP 1**  
EXCAVATE TOP OF WALL AND DRIVE FIRST LAYER OF SPIRALNAILS USING HILFIKER SPIRALNAIL HAMMER



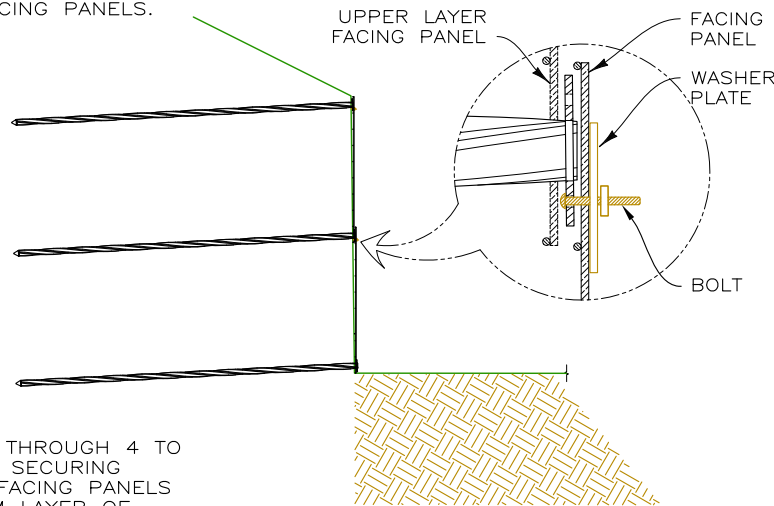
**STEP 2**  
EXCAVATE DOWN 5' AND PLACE LAYER OF FACING PANELS. ATTACH TOP OF FACING PANELS TO PREVIOUS LAYER OF SPIRALNAIL HEADS WITH BOLTS AND PLATE WASHERS.



**STEP 3**  
TO SECURE BOTTOM OF PANELS, DRIVE NEXT LAYER OF SPIRALNAILS THROUGH PREVIOUS LAYER OF WIRE MESH FACING PANELS AT THE REQUIRED ANGLE. (ANGLE VARIES PER PROJECT PLANS.)

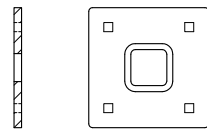


**STEP 4**  
EXCAVATE DOWN AN ADDITIONAL 5' AND PLACE ANOTHER LAYER OF FACING PANELS.

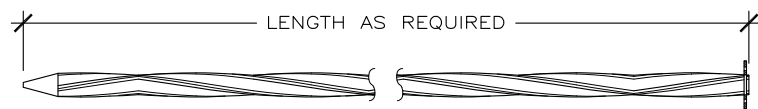


**STEP 5**  
REPEAT STEPS 3 THROUGH 4 TO BOTTOM OF WALL SECURING FINAL LAYER OF FACING PANELS WITH THE BOTTOM LAYER OF SPIRALNAILS.

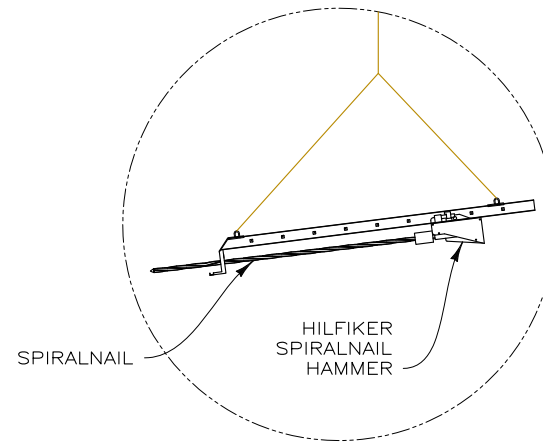
**TOP DOWN SPIRALNAIL CONSTRUCTION SEQUENCE**



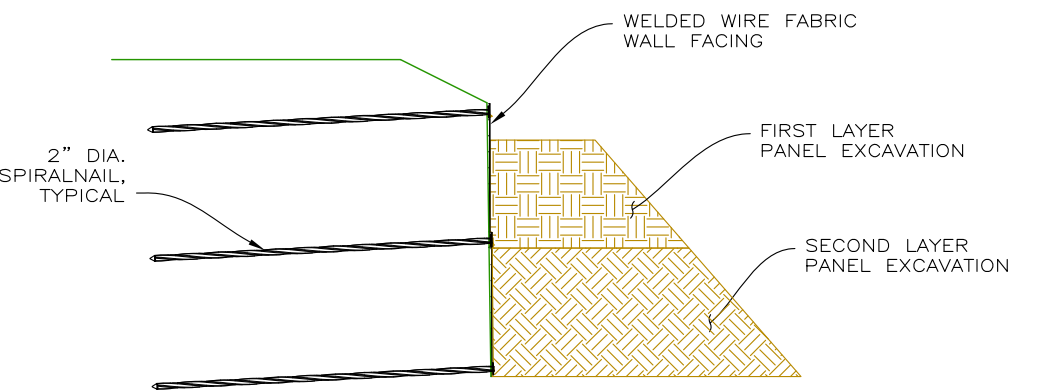
**FLANGE**



**SPIRALNAIL**

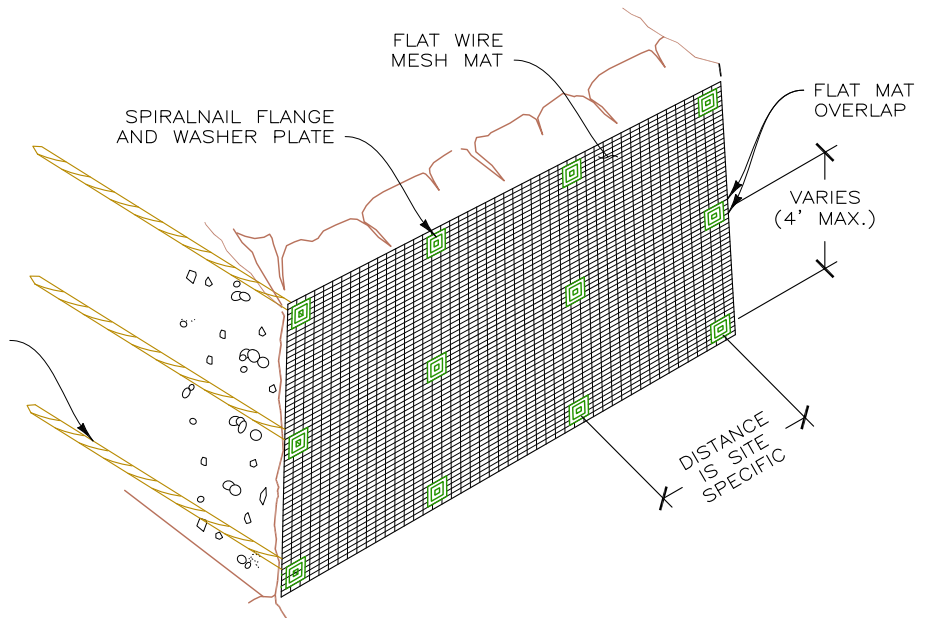


**HILFIKER SPIRALNAIL HAMMER**  
NOT TO SCALE

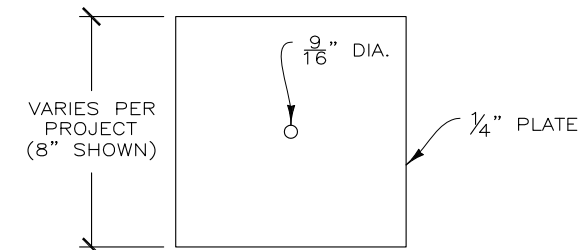


**VERTICAL EXCAVATION DETAIL**  
SCALE: 3"=20'

SPIRALNAIL, TYP. LENGTH VARIES PER PROJECT PLANS



**PICTORIAL ELEVATION**  
NOT TO SCALE

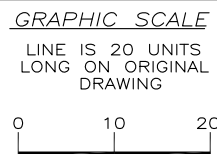


**WASHER PLATE DETAIL**  
NOT TO SCALE

SPIRALNAIL VERTICAL SN CONSTRUCTION

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REV.NO.	DATE	BY	DESCRIPTION
3	1 APR 11	AMJ	REVISED SPIRALNAIL ANGLE OF INSERTION
4	8 FEB 12	AMJ	CHANGED CONSTRUCTION SEQUENCE
5	2 MAR 12	AMJ	ADDED WASHER PLATE DETAIL
6	10 MAR 15	AMJ	REVISED SPIRALNAIL TIP, MINOR CHANGES
7	23 JUN 17	DH	UPDATE SPIRALNAIL FLANGE HEAD
8	13 JAN 18	DH	UPDATE SPIRALNAIL FLANGE HEAD



PROJ.MGR.  
HKH/BH  
ENGINEER  
CADD BY  
HRW

**HILFIKER RETAINING WALLS**

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DWG DATE  
11 MAR 05  
REVISION DATE  
13 JAN 18  
SCALE  
NOTED

**STANDARD DRAWING**  
**VERTICAL SPIRALNAIL CONSTRUCTION**  
CONSTRUCTION GUIDE AND DETAILS

PROJECT NO.  
---  
SHEET  
**1**  
OF 1