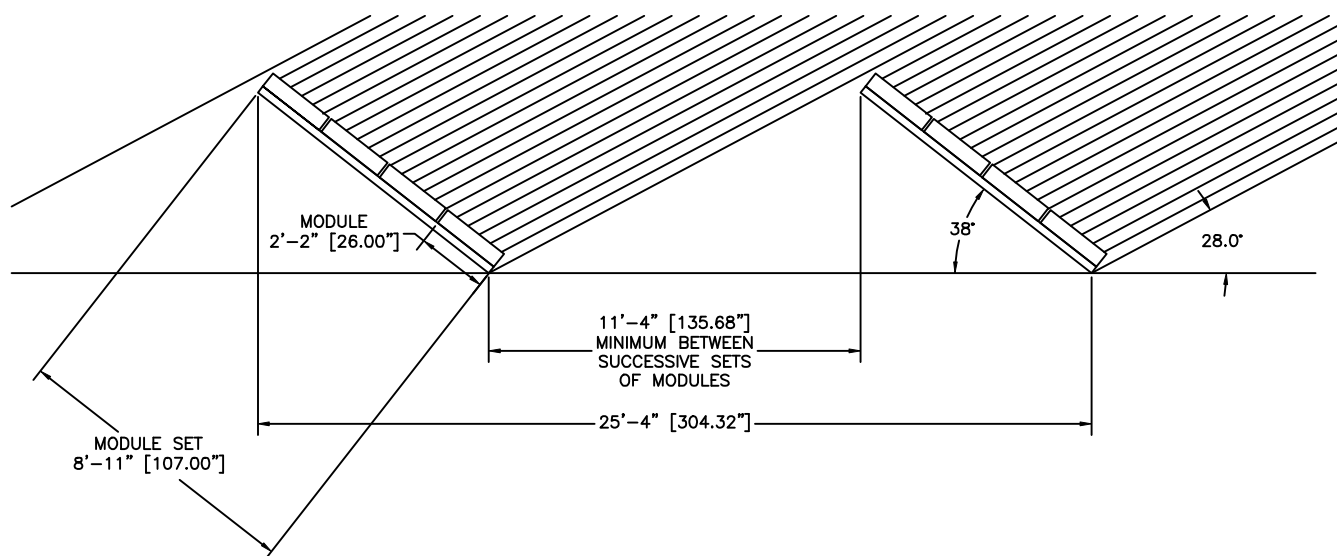
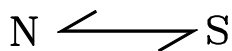
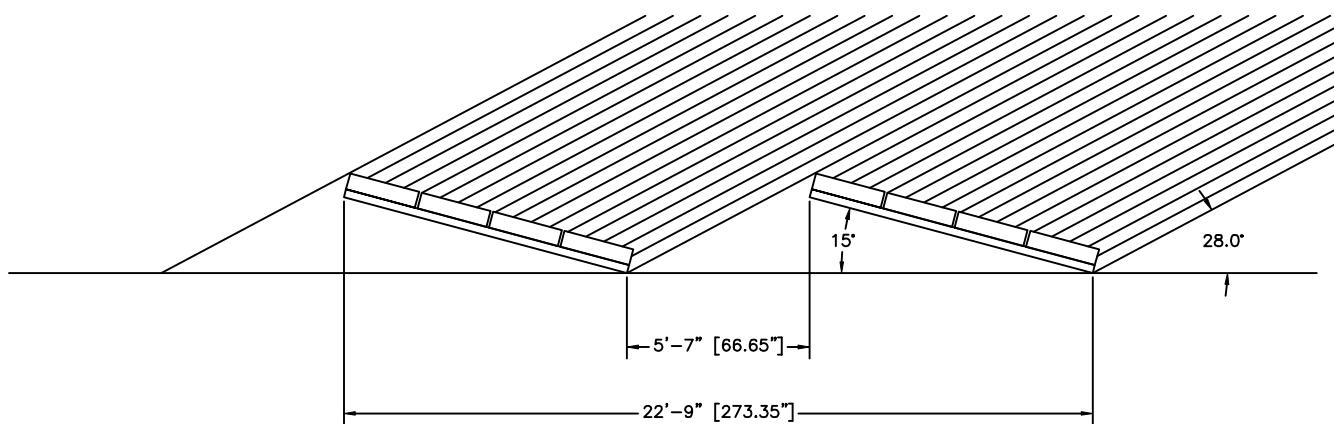


FOR MODULES MOUNTED AT 38°



FOR MODULES MOUNTED AT 15°



THIS DRAWING SHOWS THE MINIMUM SPACING BETWEEN SETS OF FOUR PV MODULES MOUNTED SHORT-WAYS ON A FLAT ROOF, TO PREVENT SHADING FROM THE WINTER SUN AT 38° LATITUDE (ANGLE OF SOLAR ELEVATION = 28° AT WINTER SOLSTICE)

CLIENT	COOPERATIVE COMMUNITY ENERGY CORP.	DRAWING FILE WINTER SHADE – SHORT	
ADDRESS	TITLE ANGLE AND SHADING GUIDE FOR PV PANEL SPACING	DRAWN BY BRENT EUBANKS	REV 1
		DATE 5/7/02	SHEET 1 OF 1