Don was born in Gonzales, Texas, in 1931, and grew up in Corpus Christi, Texas. After graduating from Corpus Christi High School, Don attended Rice University and graduated second in his class with a BS in mechanical engineering from The University of Texas in Austin in 1954. He earned his MBA from Stanford Business School in 1959. He served in the U.S. Navy between 1954-1958 as a lieutenant and aviator, flying both the F9F-6 Cougar and FJ-3 Fury aircrafts from the USS Enterprise carrier in the Far East.

Don founded Alamo Group, Inc. (ALG-NYSE) in 1969, located in Seguin, Texas, and served as its chairman from 1969 to 2011. He was chief executive officer of Alamo Group Inc. from 1969 to 1999. He served as a director of Alamo Group Inc. from 1969 to 2011. Alamo Group is a global manufacturer of high quality, tractor-mounted mowing and grounds maintenance equipment.

In 1982, the Donald J. Douglass Centennial Professorship in Engineering was established by the Board of Regents of The University of Texas System to benefit The University of Texas Cockrell School of Engineering. Also in 1982, he created The Douglass Foundation, exclusively for educational, entrepreneurial, scientific, and artistic purposes. The foundation has provided funds to schools of business, the Episcopal Diocese of West Texas for graduate-level scholarships, and Douglass Fellowships in American Art at The Metropolitan Museum of Art and The Smithsonian American Art Museum. The foundation also supported Texas Biomedical Research Institute Postdoctorate Fellowship in gene function.

In 1996, Forbes Magazine published an article about Don and his entrepreneurial success with Alamo Group and the establishment of the Douglass Foundation.

Don has a passion for poetry and the arts and was well-known for his love for American art, Impressionist art, and sculptures that inspire beauty, love, and spirituality.

Don passed away on March 27, 2017, at the age of 85. He was preceded in death by his wife of 30 years, Helen Doscher Dunlap Douglass. He was previously married to Shirley Engelhardt Douglass Burgher, and had three children, Daryl Douglass, Scott Douglass, and Laurel Douglass.