

### **Abstrak**

*The development of environmentally friendly concrete innovation technology. One of them is the use of glass bottle waste and additional sikacim concrete additive which aims to determine how much the compressive strength of concrete and the modulus of elasticity of concrete at the age of 28 days.*

*This research uses experimental methods in the laboratory by making the test object in the form of a cylinder. The percentage of glass bottle collisions used in this study was 1.5%, 2%, 2.5%, and 3% of the weight of sand and variations of Sikacim concrete additive were 0.5% and 1% of the weight of cement in the concrete mix. The test object is a cylinder with a total of 33 specimens.*

*The results showed that, in the normal concrete compressive strength test without glass bottle collision (BN1) with an age of 28 days, which was 25.28 MPa, for the highest compressive strength of glass bottle collision concrete and Sikacim concrete additive there was a test object (2Bk3) which was equal to 32.67 MPa and the lowest compressive strength of concrete is found in the test object (1BK2), which is 24.08 MPa. The maximum elastic modulus value of 28 days in the variation of the impact of glass bottles and sikacim concrete additive on the test object (2BK3) is 27892.74 MPa. In this study, the use of glass bottle collisions and Sikacim concrete additives got higher results than normal concrete.*

*Keywords : Glass bottle, Sikacim Concrete Additive, Compressive Strength, Modulus of Elasticity*