

DAFTAR PUSTAKA

- ACI 352. (2002). Recommendations for Design of Beam-Column Connections in Monolithic Reinforced Concrete Structures.
- ACI Committee 374 (2005), Acceptance Criteria for Moment Frames Based on Structural Testing and Commentary (ACI 374.1-05), American Concrete Institute, 2005
- ACI (American Concrete Institute). (2019). Building code requirements for structural concrete and commentary. ACI 318. Farmington Hills, MI: ACI.
- Alarcon, J. E. (2010). Post-Disaster Survey Findings from the 2009 Padang Earthquake. Air WorldWide Corporation, London. <https://www.air-worldwide.com/SiteAssets/Publications/AIR-Currents/attachments/AIR-Current--Padang-EQ>
- Alavi, B., & Krawinkler, H. (2004). Strengthening of moment-resisting frame structures against near-fault ground motion effects. *Earthquake Engineering & Structural Dynamics - EARTHQUAKE ENG STRUC DYNAM*, 33, 707–722. <https://doi.org/10.1002/eqe.370>
- Allam, K., Mosallam, A. S., & Salama, M. A. (2019). Experimental evaluation of seismic performance of interior RC beam-column joints strengthened with FRP composites. *Engineering Structures*, 196, 109308. <https://doi.org/10.1016/j.engstruct.2019.109308>
- Al-Salloum, Y., & Almusallam, T. (2007). Seismic Response of Interior RC Beam-Column Joints Upgraded with FRP Sheets. I: Experimental Study. *Journal of Composites for Construction - J COMPOS CONSTR*, 11. [https://doi.org/10.1061/\(ASCE\)1090-0268\(2007\)11:6\(575\)](https://doi.org/10.1061/(ASCE)1090-0268(2007)11:6(575))
- Angiolilli, M., Gregori, A., Tonelli, R., Tonelli, C., Ciuffetelli, E., & Peditto, A. (2022). Structural performance of unreinforced full-scale façade concrete beam-column joint under cyclic load. *Procedia Structural Integrity*, 44, 870–877. <https://doi.org/10.1016/j.prostr.2023.01.113>
- Antonopoulos, C. P., Triantafillou, T. C., & Asce, M. (n.d.). Experimental Investigation of FRP-Strengthened RC Beam-Column Joints. <https://doi.org/10.1061/ASCE1090-026820037:139>
- Araby, Z., Abdullah, A., & Affifuddin, M. (2020). Analysis of reinforced concrete beam-column joint structures retrofitting. *IOP Conference Series: Materials Science and Engineering*, 933(1). <https://doi.org/10.1088/1757-899X/933/1/012037>
- Attari, N., Youcef, Y. S., & Amziane, S. (2019). Seismic performance of reinforced concrete beam–column joint strengthening by frp sheets. *Structures*, 20, 353–364. <https://doi.org/10.1016/j.istruc.2019.04.007>
- Banibayat, P. (2011). EXPERIMENTAL INVESTIGATION OF THE MECHANICAL AND CREEP RUPTURE PROPERTIES OF BASALT FIBER REINFORCED POLYMER (BFRP) BARS.
- Basha, A. M., & Fayed, S. (2019). Behavior of RC Eccentric Corner Beam-Column Joint under Cyclic Loading: An Experimental Work. *Civil Engineering Journal (Iran)*, 5(2), 295–308. <https://doi.org/10.28991/cej-2019-03091245>

- Červenka, V., Jendele, L., & Prague, J. Č. (2021). ATENA Program Documentation Part 1 Theory Written by.
- Chalioris, C. E., & Bantilas, K. E. (2017). Shear strength of reinforced concrete beam-column joints with crossed inclined bars. *Engineering Structures*, 140, 241–255. <https://doi.org/https://doi.org/10.1016/j.engstruct.2017.02.072>
- Chalioris, C. E., Favvata, M. J., & Karayannis, C. G. (2008). Reinforced concrete beam-column joints with crossed inclined bars under cyclic deformations. *Earthquake Engineering and Structural Dynamics*, 37(6), 881–897. <https://doi.org/10.1002/eqe.793>
- Chalioris, C., Karayannis, C., & Favvata, M. (2007). Cyclic testing of reinforced concrete beam-column joints with crossed inclined bars. In *WIT Transactions on Modelling and Simulation* (Vol. 46). <https://doi.org/10.2495/CMEM070621>
- Choi, S. H., Kim, J. H., Jeong, H., & Kim, K. S. (2022). Seismic behavior of beam-column joints with different concrete compressive strengths. *Journal of Building Engineering*, 52. <https://doi.org/10.1016/j.jobe.2022.104484>
- Davodikia, B., Saghafi, M. H., & Golafshar, A. (2021). Experimental investigation of grooving method in seismic retrofit of beam-column external joints without seismic details using CFRP sheets. *Structures*, 34, 4423–4434. <https://doi.org/10.1016/j.istruc.2021.10.023>
- De Risi, M. T., Ricci, P., Verderame, G., & Manfredi, G. (2016). Experimental assessment of unreinforced exterior beam–column joints with deformed bars. *Engineering Structures*, 112, 215–232. <https://doi.org/10.1016/j.engstruct.2016.01.016>
- Dewi, S. H., Thamrin, R., Haris, S., & Yastari, F. P. (2024). TENSILE FORCES BEHAVIOR ON LONGITUDINAL REINFORCEMENT AND CFRP STRIPS ON CIRCULAR HOLLOW REINFORCED CONCRETE COLUMNS. *Civil and Environmental Engineering*, 20(1), 86–97. <https://doi.org/10.2478/cee-2024-0008>
- Do, T.-M.-D., Lam, T.-Q.-K., & Truong, C.-B. (2020). Analysis of Structural Failures and Remedial Measures. *IOP Conference Series Materials Science and Engineering*, 988. <https://doi.org/10.1088/1757-899X/988/1/012061>
- Engindeniz, M., Kahn, L., & Zureick, A. H. (2005). Repair and strengthening of reinforced concrete beam-column joints: State of the art. *Aci Structural Journal*, 102, 187–197.
- Esmaeeli, E., Barros, J. A. O., Sena-Cruz, J., Fasan, L., Li Prizzi, F. R., Melo, J., & Varum, H. (2015). Retrofitting of interior RC beam–column joints using CFRP strengthened SHCC: Cast-in-place solution. *Composite Structures*, 122, 456–467. <https://doi.org/https://doi.org/10.1016/j.compstruct.2014.12.012>
- Ghobarah, A., & Said, A. M. (2002). Shear strengthening of beam-column joints. *Engineering Structures*, 24, 881–888. [https://doi.org/10.1016/S0141-0296\(02\)00026-3](https://doi.org/10.1016/S0141-0296(02)00026-3)
- Gilbert, R. I., & Mickleborough, N. C. (1990). *Design of prestressed concrete*. CRC Press.
- Golias, E., Zapris, A. G., Kytinou, V. K., Osman, M., Koumtzis, M., Siapera, D., Chalioris, C. E., & Karayannis, C. G. (2021). Application of x-shaped cfrp ropes for structural upgrading of reinforced concrete beam–column joints

- under cyclic loading—experimental study. *Fibers*, 9(7).
<https://doi.org/10.3390/fib9070042>
- Gudonis, E., Timinskas, E., Gribniak, V., Kaklauskas, G., Arnautov, A. K., & Tamulėnas, V. (2014). FRP REINFORCEMENT FOR CONCRETE STRUCTURES: STATE-OF-THE-ART REVIEW OF APPLICATION AND DESIGN. *Engineering Structures and Technologies*, 5(4), 147–158.
<https://doi.org/10.3846/2029882x.2014.889274>
- Hadi, M. N. S., & Tran, T. M. (2014). Retrofitting nonseismically detailed exterior beam-column joints using concrete covers together with CFRP jacket. *Construction and Building Materials*, 63, 161–173.
<https://doi.org/10.1016/j.conbuildmat.2014.04.019>
- HAKI Confrence. (2023). Perkuatan Geser dengan Menggunakan Lembaran FRP yang Ditempel.
- Hassan, W. M., & Moehle, J. P. (2018). Shear strength of exterior and corner beam-column joints without transverse reinforcement. *ACI Structural Journal*, 115(6), 1719–1727. <https://doi.org/10.14359/51702416>
- Hung, C. C., Hsiao, H. J., Shao, Y., & Yen, C. H. (2023). A comparative study on the seismic performance of RC beam-column joints retrofitted by ECC, FRP, and concrete jacketing methods. *Journal of Building Engineering*, 64.
<https://doi.org/10.1016/j.jobe.2022.105691>
- Hwang, H.-J., Eom, T.-S., & Park, H.-G. (2015). Design considerations for interior RC beam-column joint with additional bars. *Engineering Structures*, 98, 1–13.
<https://doi.org/https://doi.org/10.1016/j.engstruct.2015.04.021>
- Imran, I., & Hendrik, F. (2013). Perencanaan Lanjut Struktur Beton Bertulang.
- Isworo, H., Pd, S., Pathur, M. T., Ansyah, R., & Eng, M. (2018). BUKU AJAR METODE ELEMEN HINGGA HMKB654.
- Jiang, Q., Xuan, D., Chong, X., Shen, J., Fan, Y., & Su, W. (2023). Seismic performance of RC interior wide beam-column joints. *Structures*, 48, 373–389.
<https://doi.org/10.1016/j.istruc.2022.12.071>
- Kam, W. Y., Pampanin, S., & Elwood, K. (2011). Seismic performance of reinforced concrete buildings in the 22 February Christchurch (Lyttelton) earthquake. *Bulletin of the New Zealand Society for Earthquake Engineering*, 44(4), 239–278. <https://doi.org/10.5459/bnzsee.44.4.239-278>
- Kamakshi, S., & Vinu, S. K. (2018). Structural Behavior of Hybrid Reinforced Concrete Exterior Beam Column Joint. *Applied Mechanics and Materials*, 877, 254–263. <https://doi.org/10.4028/www.scientific.net/amm.877.254>
- Karayannis, C., & Sirkelis, G. (2008). Strengthening and rehabilitation of RC beam-column joints using carbon-FRP jacketing and epoxy resin injection. *Earthquake Engineering & Structural Dynamics*, 37, 769–790.
<https://doi.org/10.1002/eqe.785>
- Lam, E. S., Li, B., Xue, Z., Leung, K., & Lam, J. Y. (2019). Experimental studies on reinforced concrete interior beam-column joints strengthened by unsymmetrical chamfers. *Engineering Structures*, 191, 575–582.
<https://doi.org/10.1016/j.engstruct.2019.03.099>
- Lam, E. S. shu, Li, B., Xue, Z. hang, Leung, K. tung, & Lam, J. Y. kee. (2019). Experimental studies on reinforced concrete interior beam-column joints

- strengthened by unsymmetrical chamfers. *Engineering Structures*, 191, 575–582. <https://doi.org/10.1016/j.engstruct.2019.03.099>
- Lee, J. Y., Kim, J. Y., & Oh, G. J. (2009a). Strength deterioration of reinforced concrete beam-column joints subjected to cyclic loading. *Engineering Structures*, 31(9), 2070–2085. <https://doi.org/10.1016/j.engstruct.2009.03.009>
- Lee, J. Y., Kim, J. Y., & Oh, G. J. (2009b). Strength deterioration of reinforced concrete beam-column joints subjected to cyclic loading. *Engineering Structures*, 31(9), 2070–2085. <https://doi.org/10.1016/j.engstruct.2009.03.009>
- Li, B., Lam, E. S., Wu, B., & Wang, Y. (2013). Experimental investigation on reinforced concrete interior beam–column joints rehabilitated by ferrocement jackets. *Engineering Structures*, 56, 897–909. <https://doi.org/https://doi.org/10.1016/j.engstruct.2013.05.038>
- Li, J., Pam, H. J., & Au, F. T. K. (2004). New Details of HSC Beam-Column Joints for Regions of Low to Moderate Seismicity. <https://api.semanticscholar.org/CorpusID:112327885>
- Liang, X., Wang, Y., Tao, Y., & Deng, M. (2016). Seismic performance of fiber-reinforced concrete interior beam-column joints. *Engineering Structures*, 126, 432–445. <https://doi.org/https://doi.org/10.1016/j.engstruct.2016.08.001>
- Lim, C., Jeong, Y., Kim, J., & Kwon, M. (2022). Experimental study of reinforced concrete beam-column joint retrofitted by CFRP grid with ECC and high strength mortar. *Construction and Building Materials*, 340. <https://doi.org/10.1016/j.conbuildmat.2022.127694>
- Mostofinejad, D., & Hajrasouliha, M. (2019). 3D beam–column corner joints retrofitted with X-shaped FRP sheets attached via the EBROG technique. *Engineering Structures*, 183, 987–998. <https://doi.org/10.1016/j.engstruct.2019.01.038>
- Obaidat, Y. T., Abu-Farsakh, G. A. F. R., & Ashteyat, A. M. (2019). Retrofitting of partially damaged reinforced concrete beam-column joints using various plate-configurations of CFRP under cyclic loading. *Construction and Building Materials*, 198, 313–322. <https://doi.org/https://doi.org/10.1016/j.conbuildmat.2018.11.267>
- Prasanna, K., Ramasubramani, R., Anandh, K. S., Saisabarish, S., & Maddu, V. K. (2017). Strengthening of beam - Column joint with steel fibre reinforced concrete under seismic loading. *IOP Conference Series: Earth and Environmental Science*, 80(1). <https://doi.org/10.1088/1755-1315/80/1/012040>
- Rajagopal, S., & Prabavathy, S. (2015). Investigation on the seismic behavior of exterior beam–column joint using T-type mechanical anchorage with hair-clip bar. *Journal of King Saud University - Engineering Sciences*, 27(2), 142–152. <https://doi.org/https://doi.org/10.1016/j.jksues.2013.09.002>
- Ruiz-Pinilla, J. G., Pallarés, F. J., Gimenez, E., & Calderón, P. A. (2014). Experimental tests on retrofitted RC beam-column joints underdesigned to seismic loads. General approach. *Engineering Structures*, 59, 702–714. <https://doi.org/https://doi.org/10.1016/j.engstruct.2013.11.008>
- Sachdeva, P., Danie Roy, A. B., & Kwatra, N. (2021). Behaviour of steel fibers reinforced exterior beam-column joint using headed bars under reverse cyclic

- loading. Structures, 33, 3929–3943. <https://doi.org/10.1016/j.istruc.2021.06.074>
- Shafaei, J., Hosseini, A., & Marefat, M. S. (2014). Seismic retrofit of external RC beam–column joints by joint enlargement using prestressed steel angles. Engineering Structures, 81, 265–288. <https://doi.org/https://doi.org/10.1016/j.engstruct.2014.10.006>
- Sharma, R., & Bansal, P. P. (2019). Behavior of RC exterior beam column joint retrofitted using UHP-HFRC. Construction and Building Materials, 195, 376–389. <https://doi.org/10.1016/j.conbuildmat.2018.11.052>
- Shen, D., Li, M., Kang, J., Liu, C., & Li, C. (2021). Experimental studies on the seismic behavior of reinforced concrete beam-column joints strengthened with basalt fiber-reinforced polymer sheets. Construction and Building Materials, 287. <https://doi.org/10.1016/j.conbuildmat.2021.122901>
- Shen, X., Li, B., Chen, Y.-T., & Tizani, W. (2021). Seismic performance of reinforced concrete interior beam-column joints with novel reinforcement detail. Engineering Structures, 227. <https://doi.org/10.1016/j.engstruct.2020.111408>
- SNI 2847. (2019). SNI-2847-2019-Persyaratan-Beton-Struktural-Untuk-Bangunan-Gedung-1.
- SNI 8971. (2021). sni-8971-2021 panduan perancangan dan pelaksanaan sistem lembaran serat berpolimer terlekat eksternal untuk perkuatan struktur beton.
- Sunaryati, J. (2010). Penggunaan Base Isolated System Untuk Bangunan Tahan Gempa. Lustrum V Fakultas Teknik Unand.
- Thamrin, R. (n.d.). Analytical Prediction on Flexural Response of RC Beams Strengthened with Steel Plates.
- Thamrin, R., Haris, S., Hartati Dewi, S., & Putri Yastari, F. (n.d.). Shear Capacity of Hollow Reinforced Concrete Members without Stirrups Strengthened with CFRP Sheets.
- Thamrin, R., & Kaku, T. (2005). DEVELOPMENT LENGTH EVALUATION OF REINFORCED CONCRETE BEAM WITH CFRP BARS.
- Thamrin, R., Tanjung, J., Aryanti, R., Nur, O., & DEVINUS, A. (2016). Shear strength of reinforced concrete T-beams without stirrups. Journal of Engineering Science and Technology, 11, 548–562.
- Tuakta, C., & Whittle, A. J. (2004). USE OF FIBER REINFORCED POLYMER COMPOSITE IN BRIDGE STRUCTURES.
- Ugale, A. B., & Khante, S. N. (2020). Study of energy dissipation of reinforced concrete beam-column joint confined using varying types of lateral reinforcements. Materials Today: Proceedings, 27, 1356–1361. <https://doi.org/10.1016/j.matpr.2020.02.690>
- Ugale, A. B., & Khante, S. N. (2021). Hysteretic performance of reinforced concrete external beam-column joint subassemblies using non-conventional diagonal bars. Structures, 32, 2042–2047. <https://doi.org/10.1016/j.istruc.2021.03.082>
- Wang, D., Zhao, J., Ju, Y., Shen, H., & Li, X. (2022). Behavior of beam-column joints with high performance fiber-reinforced concrete under cyclic loading. Structures, 44, 171–185. <https://doi.org/10.1016/j.istruc.2022.07.090>
- Wang, J. H. (2021). Cyclic behaviors of reinforced concrete beam-column joints with debonded reinforcements and beam failure: experiment and analysis.

Bulletin of Earthquake Engineering, 19(1), 101–133.
<https://doi.org/10.1007/s10518-020-00974-1>

Winarni, & Pratomo, H. (2005). DASAR DASAR ELEMEN HINGGA (1st ed.). PT Danamarta Seahtera Utama.

Yang, H., Zhao, W., Zhu, Z., & Fu, J. (2018). Seismic behavior comparison of reinforced concrete interior beam-column joints based on different loading methods. Engineering Structures, 166, 31–45.
<https://doi.org/10.1016/j.engstruct.2018.03.022>

Yang, Y., Xue, Y., Wang, N., & Yu, Y. (2019). Experimental and numerical study on seismic performance of deficient interior RC joints retrofitted with prestressed high-strength steel strips. Engineering Structures, 190, 306–318.
<https://doi.org/10.1016/j.engstruct.2019.03.096>

Yang, Z., Liu, Y., & Li, J. (2018). Study of Seismic Behavior of RC Beam-Column Joints Strengthened by Sprayed FRP. Advances in Materials Science and Engineering, 2018. <https://doi.org/10.1155/2018/3581458>

Yosafat. (2019a). Diktat Kuliah Metode Elemen Hingga.

Yosafat, A. P. S. T. (2019b). DIKTAT KULIAH METODE ELEMEN HINGGA.

Zabihi, A., Tsang, H.-H., Gad, E. F., & Wilson, J. L. (2018). Seismic retrofit of exterior RC beam-column joint using diagonal haunch. Engineering Structures, 174, 753–767.
<https://doi.org/https://doi.org/10.1016/j.engstruct.2018.07.100>

