

Use BCEGS® for your underwriting and rating to charge adequate premiums and gain a competitive edge



The aftermath of Hurricane Ike shows only one home left standing on a devastated barrier island. The home was built to withstand the high natural hazard potential in the region — with dramatic positive results.

Jocelyn Augustino/FEMA

Building Code Effectiveness Grading Schedule (BCEGS®)

ISO's BCEGS® program assesses the building codes in effect in a particular community and how the community enforces them, with special emphasis on mitigating losses from natural hazards.

Municipalities with well-enforced, up-to-date codes should demonstrate better loss experience. Reducing catastrophe-related damage and ultimately lowering insurance costs provide an incentive for communities to adopt the latest building codes and enforce them rigorously.

Through the BCEGS program, ISO assigns each municipality a Building Code Effectiveness Classification from 1 (exemplary commitment to building-code enforcement) to 10 for both commercial and residential construction. Insurers and individual policyholders benefit from reduced losses in communities with favorable classifications.

Effective code enforcement leads to safer buildings, less damage from catastrophes, and lower insured losses.

Building-code data sets ISO apart

At an insurer's request, ISO can supply the underlying data that goes into developing the BCEGS classification. Many insurers have found that details on staff training and certification, workloads, type of construction projects, and volume and value of construction are just as valuable as the classification itself. ISO can also collect data of special interest to your company.



How ISO determines the classification

ISO evaluates many criteria, including staffing levels and qualifications of plan reviewers and field inspectors, code adoption and amendment, and the community’s commitment to building-code enforcement. We assign each criterion a certain number of points and total the points to arrive at the BCEGS class. The classification table below shows the point range that corresponds to each class.

Classification Table

Class	Point range
1	93.00 – 100.00
2	85.00 – 92.99
3	77.00 – 84.99
4	65.00 – 76.99
5	56.00 – 64.99
6	48.00 – 55.99
7	39.00 – 47.99
8	25.00 – 38.99
9	10.00 – 24.99
10	0.00 – 9.99

Building department evaluation — an example

The table below for a sample building department highlights some of the key criteria that make up the BCEGS classification. In this example, the table shows points earned out of the maximum points available in the schedule for each of the criteria.

Select criteria	Community points earned	Maximum BCEGS points available	% of points earned by sample department
Training	11	13	85
Certification	9	12	75
Experience and qualifications of building officials	6.5	8.5	76
Plan review staffing	6	9	67
Inspection staffing	8	9	89
Plan review details	9	11.5	78
Natural hazard mitigation	1	2	50
Building-code adoption	4.8	8	60
Building-code amendments	0	4	0

See page 3 for color-coded definitions

Training, certification, and experience play a key role in determining the effectiveness of building-code enforcement. As the table shows, the grading allocates almost 34 percent of total points to those criteria. In our example, the building department has earned 26.5 out of a maximum 33.5 points.

Adequate staffing levels include plan review staffing and inspection staffing, which earned the community 6 out of 9 points and 8 out of 9 points, respectively. The BCEGS classification in effect during the year of construction earned 4.8 points out of a maximum 8 points for building-code adoption and 0 points out of a maximum 4 points for building-code amendments.

Understanding the criteria that make up the BCEGS class

The BCEGS manual contains numerous criteria to assess the building codes in effect in a particular community. Here are some of the key criteria we used to grade our sample community.

Training, certification, experience, and qualifications of building officials and code-enforcement personnel

A community receives points based on training expenditures; hours of training received; and the qualifications, certification, education, and work experience of code-enforcement personnel and building officials.

Plan review staffing

A community receives points based on whether the department has sufficient staffing to complete a maximum of one commercial or two residential plan reviews per day per plan reviewer over the course of a year. An increased workload — as indicated by more plan reviews — can mean fewer points earned.

Inspection staffing

A community receives points based on whether the department has sufficient staffing to complete a maximum of ten inspections per day per inspector over the course of a year. An increased workload — as indicated by more inspections — can mean fewer points earned.

Plan review details

A community receives points based on the processes in place to promote accuracy, completeness, and consistency of plan reviews.

Natural hazard mitigation

A community receives points based on its efforts to inspect structural features designed to mitigate damage from natural hazards common to the area.

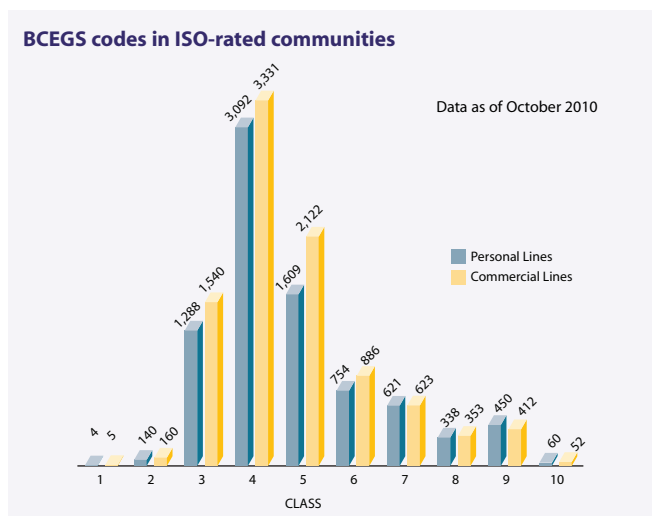
Building-code adoption

Communities should adopt and enforce the latest code edition of a nationally recognized building-code development and publication organization. A community receives fewer points for adopting less current building codes.

Building-code amendments

A community receives points based on its adoption of unamended building codes. A community earns fewer points when it amends the code to be less conservative than the nationally published code.

It takes hard work and constant diligence for communities to achieve the best status. The following chart shows the distribution of BCEGS classes across the United States for both commercial and residential construction in the communities that ISO has rated. An individual building's grading depends on the community's rating in the year of construction.



Are the properties you're insuring in communities at the head of their class?

BCEGS Class 1–3

Just 18 percent of BCEGS evaluations result in a Class 1, 2, or 3. A building-code enforcement department that scores in that range enforces the latest model code without amendments that would weaken the code's ability to reduce damage from natural hazards. The department has all the resources required to enforce its adopted code rigorously. The department also has a sufficient number of trained and certified staff to devote adequate time to plan reviews and inspections.

BCEGS Class 4–6

The majority of communities ISO surveys (67 percent) earn a BCEGS Class 4, 5, or 6. Such a department may not have earned enough BCEGS points on criteria such as:

- inspection staffing
- plan review staffing
- training
- continuing education
- building-code adoption
- building-code amendments

Employees may be receiving on-the-job training but may not have certification in their areas of responsibility. Or perhaps record keeping and other management functions haven't earned maximum points.



BCEGS Class 7–10

Only about 15 percent of the communities ISO surveys receive a BCEGS Class 7, 8, 9, or 10. A department in that range probably hasn't earned enough BCEGS points on a number of evaluation criteria, or it has scored poorly on key criteria. Typically, such a department is enforcing a building code seven or more years old or a more recent code edition that the state, county, or local jurisdiction has amended to reduce its effectiveness against a natural hazard prevalent in the area.

BCEGS Class 98

BCEGS Class 98 is restricted to building-code enforcement departments in the state of Florida. Florida legislation mandates a 1 percent insurance surcharge for risks within the jurisdictional boundaries of a building-code enforcement department that declines to participate in the BCEGS program.

BCEGS Class 99

ISO can assign a BCEGS Class 99 to a building-code enforcement department for several reasons:

- The community developed properties before the initial BCEGS evaluation of the building-code enforcement jurisdiction.
- The building-code enforcement jurisdiction doesn't meet the minimum requirements for participating in the BCEGS program.
- The building-code enforcement jurisdiction declines to participate in the BCEGS program.



John Fleck/FEMA

For more information...

...about the BCEGS program, please call ISO at 1-800-444-4554, or send e-mail to communitymitigation@iso.com. Be sure to visit ISO Mitigation Online at www.isomitigation.com — your source for up-to-date information on community efforts to mitigate the risk of losses from fire and natural hazards.



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