ICC EVALUATION SERVICE, INC.
Evaluate ■ Inform ■ Protect

March 4, 2008

TO: **PARTIES INTERESTED IN EVALUATION REPORTS ON COLD-FORMED STEEL FRAMING MEMBERS USED FOR INTERIOR NON-LOAD BEARING WALL ASSEMBLIES**

SUBJECT: Acceptance Criteria for Cold formed Steel Framing Members Used for Interior Nonload-bearing Wall Assemblies, Subject AC86-0208-R1 (PB/WM)

Dear Madam or Sir:

Enclosed is a copy of the subject revised acceptance criteria approved by the ICC-ES Evaluation Committee on February 5, 2007, effective March 1, 2008.

Revisions were approved in Section 3.2.2, permitting the use of different deflection limit in specific cases; with the deletion of Section 3.2.2.3, which removes the load adjustment factor of 1.5 from the provisions of AC86 concerned with deriving wall heights based on assembly stiffness; and in Section 4.1.2, permitting a reduction in the number of test assemblies in specific cases.

ICC-ES evaluation reports issued on or after the effective date noted above, both new reports and conversions of legacy reports, must comply with this criteria if they fall within its scope.

If you have any questions, please contact Peter Bahlo, senior staff engineer at (800) 423-6587, extension 3306. You may also reach us by e-mail at es@icc-es.org.

Yours very truly,

Kurt Stochlia, P.E.
Vice President

KS/PB/raf

Enclosure

cc: Evaluation Committee

ACCEPTANCE CRITERIA FOR COLD-FORMED STEEL FRAMING MEMBERS—INTERIOR NONLOAD-BEARING WALL ASSEMBLIES

AC86

Approved February 2008

Effective March 1, 2008

Previously approved June 2007, July 1995

PREFACE

Evaluation reports issued by ICC Evaluation Service, Inc. (ICC-ES), are based upon performance features of the International family of codes and other widely adopted code families, including the Uniform Codes, the BOCA National Codes, and the SBCCI Standard Codes. Section 104.11 of the *International Building Code*® reads as follows:

> The provisions of this code are not intended to prevent the installation of any materials or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.

Similar provisions are contained in the Uniform Codes, the National Codes, and the Standard Codes.

This acceptance criteria has been issued to provide all interested parties with guidelines for demonstrating compliance with performance features of the applicable code(s) referenced in the acceptance criteria. The criteria was developed and adopted following public hearings conducted by the ICC-ES Evaluation Committee, and is effective on the date shown above. All reports issued or reissued on or after the effective date must comply with this criteria, while reports issued prior to this date may be in compliance with this criteria or with the previous edition. If the criteria is an updated version from the previous edition, a solid vertical line (**I**) in the margin within the criteria indicates a technical change, addition, or deletion from the previous edition. A deletion indicator (**➜**) is provided in the margin where a paragraph has been deleted if the deletion involved a technical change. This criteria may be further revised as the need dictates.

ICC-ES may consider alternate criteria, provided the report applicant submits valid data demonstrating that the alternate criteria are at least equivalent to the criteria set forth in this document, and otherwise demonstrate compliance with the performance features of the codes. Notwithstanding that a product, material, or type or method of construction meets the requirements of the criteria set forth in this document, or that it can be demonstrated that valid alternate criteria are equivalent to the criteria in this document and otherwise demonstrate compliance with the performance features of the codes, ICC-ES retains the right to refuse to issue or renew an evaluation report, if the product, material, or type or method of construction is such that either unusual care with its installation or use must be exercised for satisfactory performance, or if malfunctioning is apt to cause unreasonable property damage or personal injury or sickness relative to the benefits to be achieved by the use of the product, material, or type or method of construction.

ACCEPTANCE CRITERIA FOR COLD-FORMED STEEL FRAMING MEMBERS—INTERIOR NONLOAD-BEARING WALL ASSEMBLIES

1.0 INTRODUCTION

1.1 Purpose: This criteria covers a procedure for testing and evaluating the structural performance of cold-formed steel vertical framing members (studs) used in interior, nonload-bearing wall assemblies, and establishing limiting wall heights for recognition in ICC Evaluation Service, Inc., (ICC-ES) evaluation reports under the 2006 *International Building Code*® (IBC), the 2006 *International Residential Code*® (IRC), the BOCA® *National Building Code*/1999 (BNBC), the 1999 *Standard Building Code*© (SBC), and the 1997 *Uniform Building Code*™ (UBC). Bases of recognition are IBC Section 104.11, IRC Section R104.11, BNBC Section 106.4, SBC Section 103.7, and UBC Section 104.2.8.

The reason for the development of this criteria is to establish an empirical method of determining limiting wall heights based on stiffness and strength characteristics of interior nonload-bearing wall assemblies, consisting of cold-formed steel studs and gypsum panel products installed on one or both sides of the wall such that the wall responds to transverse loading as an assembly. This empirical approach is an alternative to the sheathing-braced design referenced in the building codes for cold-formed steel stud wall assemblies resisting transverse loads.

1.2 Scope: The information obtained by the provisions of this criteria is applicable to the design of field-fabricated interior nonload-bearing walls when using the Allowable Stress Design (ASD) method where the transverse design loads are limited to 5, $7^1/_2$, 10, and 15 psf (240, 360, 480, and 720 Pa) and where the superimposed axial design load is zero pounds.

1.3 Codes and Referenced Standards:

1.3.1 2006 *International Building Code*® (IBC), International Code Council.

1.3.2 2006 *International Residential Code*® (IRC), International Code Council.

1.3.3 BOCA® *National Building Code*/1999 (BNBC).

1.3.4 1999 *Standard Building Code*© (SBC).

1.3.5 1997 *Uniform Building Code*™ (UBC).

1.3.6 AISI NAS-01, North American Specification for the Design of Cold-formed Steel Framing, including 2004 Supplement, American Iron and Steel Institute.

1.3.7 AISI General-04, Standard for Cold-formed Steel Framing—General Provisions, American Iron and Steel Institute.

1.3.8 AISI WSD-04, Standard for Cold-formed Steel Framing—Wall Stud Design, American Iron and Steel Institute.

1.3.9 ASTM A 370-05, Standard Test Methods and Definitions for Mechanical Testing of Steel Products, ASTM International.

1.3.10 ASTM C 473-03, Standard Test Methods for Physical Testing of Gypsum Panel Products, ASTM International.

1.3.11 ASTM C 1178–04, Standard Specification for Coated Glass Mat Water-Resistant Gypsum Backing Panel, ASTM International.

1.3.12 ASTM C 1278–03, Standard Specification for Fiber-Reinforced Gypsum Panel, ASTM International.

1.3.13 ASTM C 1396-02, Standard Specification for Gypsum Board, ASTM International.

1.3.14 ASTM E 72-02, Standard Test Methods of Conducting Strength Tests of Panels for Building Construction, ASTM International.

1.4 Definitions:

1.4.1 Interior Nonload-bearing Wall Assembly: A field-fabricated wall assembly consisting of cold-formed steel vertical framing members (studs) spaced a maximum of 24 inches (610 mm) on center and gypsum panel products sheathed on one or both sides of the wall assembly. Installation of the wall assemblies in a structure shall be limited to interior applications where the superimposed axial load is zero pounds.

1.4.2 Stud: A cold-formed steel vertical framing member in a wall assembly.

1.4.3 Gypsum Panel Products: The general name for a family of sheet products consisting essentially of gypsum.

1.4.4 Set Deflection: The deflection reading obtained five minutes after the application or release of test loads.

2.0 BASIC INFORMATION

2.1 General:

2.1.1 Description: Each component of the wall assembly shall be described with respect to material specifications, dimensions, and compliance with applicable standards or ICC-ES acceptance criteria.

2.1.1.1 Cold-formed steel framing members shall conform to the field identification and quality control requirements of the ICC-ES Acceptance Criteria for Cold-formed Steel Framing Members (AC46). Sheet steel materials used in the steel wall stud construction shall comply with the requirements in Section 2210.4 of the IBC.

2.1.1.2 Gypsum panel products shall comply with ASTM C 1396, C 1278, or C 1178, as applicable.

2.1.1.3 Fasteners shall comply with applicable standards, specifications, or ICC-ES acceptance criteria.

2.1.2 Installation Instructions: Installation instructions shall be submitted, and include information on type and thickness of the gypsum panel product, attachment of gypsum panel products to the steel studs (orientation of panel products, location of panel joints, type and size of panel fasteners, fastening schedule, and joint and face treatments) and attachment of steel studs to tracks.

2.1.3 Identification: A description of the method of field identification of the components of the interior nonload-bearing wall assembly qualified in accordance with this acceptance criteria shall be provided. Products shall be marked, as applicable, in accordance with the relevant acceptance criteria or ASTM specification, or both.

2.2 Testing Laboratories: Testing laboratories shall comply with Section 2.0 of the ICC-ES Acceptance Criteria for Test Reports (AC85) and Section 4.2 of the ICC-ES Rules of Procedure for Evaluation Reports.

2.3 Test Reports: Test reports shall comply with AC85 and include:

2.3.1 A description of the test specimens, including installation details and specifications of the gypsum panel products, cold-formed steel framing members, fastener type and size, and fastener schedule. The description of studs and gypsum panel products shall also be supplemented by test data on the yield and tensile strength of the cold-formed studs, bare-metal thickness of the steel studs, and the flexural strength of the gypsum panel products, when required. The description of the test specimens shall also include the orientation of panel products and location of panel joints.

2.3.2 A description of the gypsum panel product type and product name, including the manufacturer's name, when required. (Refer to Section 3.1.3.)

2.3.3 A description of the test procedures, test results, deflection and load measurements, observations, calculations deriving limiting wall heights based on stiffness and strength test data of tested assemblies, and photographs of typical wall assembly test specimens and typical failures.

2.4 Product Sampling and Preparation of Test Assemblies: Sampling of the components of interior nonload-bearing walls for tests under this criteria shall comply with Section 3.2 of AC85. Preparation of test assemblies shall be witnessed by the testing laboratory in accordance with Section 3.3 of AC85.

3.0 TEST AND PERFORMANCE REQUIREMENTS

3.1 General: The allowable height of an interior nonload-bearing wall assembly shall be the lesser of the limiting height based on wall assembly stiffness in accordance with Section 3.2 or the limiting height based on wall assembly strength in accordance with Section 3.3.

3.1.1 Test specimens shall be representative of the wall construction for which recognition in an evaluation report is desired, as to materials, workmanship, and details such as orientation of gypsum panel products and location of panel joints, except that joints and fasteners shall not be treated.

3.1.2 One representative steel sample shall be obtained from each tested wall assembly to verify steel thickness both before and after removal of the galvanized coating. When the manufacturing processes that cold forms steel to a shape make taking thickness measurements impossible, a minimum of ten samples cut from flat sheets taken from the same coil of steel used to cold form the steel studs, shall be obtained. Additionally, yield strength, tensile strength, and elongation shall be verified using ASTM A 370 test procedures. When the maximum allowable transverse load specified in the evaluation report for the interior nonload-bearing wall assembly is limited to 5 psf (240 Pa), only the yield strength need be verified.

3.1.3 The type, thickness, and product name of gypsum panel product shall be identified. The type and product name of the gypsum panel product do not need to be reported in the evaluation report when the flexural strength of the gypsum panel products used in the tests does not exceed the minimum values set forth in the applicable ASTM standard by more than 15 percent. The gypsum panel product shall be evaluated independently in accordance with ASTM C 473, except none of the single test values shall be discarded, and the test data shall be included in the test report for the wall assemblies. At least three panels from each shipment received by the test agency shall be selected for physical property testing, provided they constitute a representative sample for the purpose of wall assembly tests.

3.1.4 Unsymmetrical wall systems shall be tested in the weakest and most flexible direction.

3.2 Limiting Heights Based on Wall Assembly Stiffness: Testing shall be in accordance with Section 4.1 of this criteria and the analysis of test data shall be in accordance with Sections 3.2.1 through 3.2.5.

3.2.1 Wall assembly bending stiffness, *EI*, shall be based on the equation for midspan deflection of a simply supported beam with uniformly distributed loading over its entire span. An *EI* value for each midspan deflection target shall be calculated based on the incremental deflection from previous set deflection after release of load to the current set deflection after application of load. Average *EI* values shall be determined from the test results for each test assembly height. For a specific test specimen, the arithmetical average of the *EI* values derived for each deflection target shall be used when the deviation of any individual deflection target *EI* value does not exceed ±15 percent of the specimen's average *EI* value. If such a deviation from the average value exceeds 15 percent for any test assembly, then the *EI* values for each specific deflection target of all specimens shall be averaged. The deflection-target-specific *EI* values shall be used to calculate the limiting heights for that test assembly height.

3.2.2 The wall assembly's controlling *EI* value derived in accordance with Section 3.2.1 shall be used to calculate limiting wall heights for deflection target values L/360, L/240 and L/120 (if a L/120 deflection level cannot be obtained, it shall be permitted to use L/180 in place of L/120); and transverse design loads of 5, $7^1/_2$, 10, and 15 psf (240, 360, 480, and 720 Pa), provided:

3.2.2.1 The measured uncoated steel thickness of the studs in each test assembly does not vary from the specified (design) thickness by ±5 percent when steel samples are obtained from each tested wall assembly to verify steel thickness.

3.2.2.2 The measured uncoated steel thickness of samples cut from flat sheets taken from coil steel does not vary from the coil steel thickness specified in the quality documentation by ±5 percent when it is not possible to measure steel thickness of studs in each test assembly because the manufacturing processes that cold forms steel to a shape makes taking measurements impossible.

3.2.2.3 The unloaded set deflection is less than 20 percent of the loaded set deflection.

3.2.3 Limiting wall heights may be derived by linear interpolation between the derived limiting height value (H_1) from one test span and the derived limiting height value (H_2)

from the next taller test span:

$$L_{LH} = \frac{(L_1 \times H_2) - (L_2 \times H_1)}{H_2 - H_1 - L_2 + L_1}$$

where:

L_{LH} = Interpolated limiting wall height, ft (m).

L_1 = Actual span of short test assembly, ft (m).

L_2 = Actual span of tall test assembly, ft (m).

H_1 = Derived limiting height for a specific deflection target and design load based on the controlling *EI* value from short-span wall test data, ft (m).

H_2 = Derived limiting height for a specific deflection target and design load based on the controlling *EI* value from long-span wall test data, ft (m).

3.2.3.1 If the calculated limiting heights derived from the shorter test assemblies are greater than twice the height of the taller assemblies, then the calculated limiting height based on the taller test assemblies shall be used rather than an interpolated value.

3.2.3.2 If for any specific design load and deflection target combination a calculated limiting wall height based on the shorter test assemblies is less than the actual test span, the calculated height value shall be discarded and the wall assembly shall not be permitted to resist that specific design load and deflection target.

3.2.3.3 In no case shall the interpolated value, L_{LH}, be greater than the mean value between calculated values H_1 and H_2.

3.2.4 Linear extrapolation of the controlling *EI* value may be used to determine limiting wall heights greater than the those tested, up to twice the height of the test assemblies.

3.2.5 A controlling *EI* value shall only be used to calculate limiting wall heights for target deflection values that are included in the derivation of the controlling *EI* value for the test wall assembly.

3.3 Limiting Heights Based on Wall Assembly Strength: The design of cold-formed steel studs for interior nonload-bearing wall assemblies shall be in accordance with AISI-WSD. When the wall assembly construction deviates from the AISI-WSD provisions, limiting wall heights based on strength characteristics of the wall assembly may be derived in accordance with the provisions of this section. Flexural and end-reaction testing shall be in accordance with Sections 4.1 and 4.2, respectively, and the analysis of test data shall be in accordance with Sections 3.3.1 and 3.3.2, respectively.

3.3.1 Wall assembly limiting height based on flexural strength shall be derived using the following formula:

$$L_f = \sqrt{\frac{R_s P L_t^2}{\Omega W}}$$

where:

L_f = Limiting height based on flexural strength, ft (m).

R_s = Adjustment factor (refer to Section 3.3.1.1).

P = Controlling peak test load (refer to Section 3.3.1.2), psf (Pa).

L_t = Span of test assembly, ft (m).

Ω = Safety factor (refer to Section 3.3.1.3).

W = Design load (refer to Section 3.3.1.4), psf (Pa).

3.3.1.1 If the yield point of the steel from which the studs are formed is larger than the specified minimum value, or the thickness of the steel is greater than the specified (design) thickness, or both, the controlling test peak load shall be scaled by an adjustment factor, R_s:

$$R_s = \left(\frac{F_{y-specified}}{F_{y-tested}}\right) \times \left(\frac{t_{specified}}{t_{tested}}\right) \leq 1.0$$

where:

$F_{y\text{-}specified}$ = Specified yield stress of the steel, psi (MPa).

$F_{y\text{-}tested}$ = Measured yield stress of the steel, psi (MPa).

$t_{specified}$ = Design steel thickness specified in the evaluation report or the coil steel thickness specified in the quality documentation, as applicable, inch (mm).

t_{tested} = Measured steel thickness, inch (mm)

3.3.1.2 The controlling peak test load of a set of wall assemblies of the same height shall be in accordance with Section 4.1.

3.3.1.3 Safety factor, Ω, shall be in accordance with Section F1.2 of AISI-NAS. The following variables for the resistance factor equation in Chapter F of AISI-NAS (Eq. F1.1-2) shall be used, unless data justifying other variables are submitted:

β_o = Target reliability index = 2.5

M_m = Mean value of the material factor = 1.0

V_M = COV of the material factor = 0.10

V_F = COV of the fabrication factor = 0.15

3.3.1.4 The transverse design loads, *W*, shall be limited to 5, $7^1/_2$, 10, and 15 psf (240, 360, 480, and 720 Pa) and shall not be multiplied by 0.75 or any other factor associated with short-term loading. For compliance with the UBC, transverse design loads, *W*, may be multiplied by 0.75, or the allowable flexural resistance of the assembly determined in accordance with Section 3.3.1 may be increased by one-third, but not both.

3.3.1.5 Linear interpolation between the multiple test heights is permitted to derive limiting heights based on flexural strength between sets of wall assemblies having different heights.

3.3.1.6 Linear extrapolation of flexural strength data may be used to derive limiting wall heights greater than those tested, up to twice the height of the tested assemblies.

3.3.2 Wall assembly limiting height based on end reaction strength shall be derived using the following formula:

$$L_r = \frac{R_s B L_t}{\Omega W}$$

where:

L_r = Limiting height based on end reaction, ft (m).

R_s = Adjustment factor (refer to Section 3.3.1.1).

B = Controlling peak test load, psf (Pa), in accordance with Section 4.2 of this criteria.

L_t = Actual span of the nominal 4-foot test assembly, ft (m).

Ω = Safety factor in accordance with Section F1.2 of AISI-NAS.

W = Transverse design load (refer to Section 3.3.1.4), psf (Pa).

4.0 TEST METHODS

4.1 Transverse Load Testing:

4.1.1 Wall assemblies at two different heights shall be tested. The taller set of wall test assemblies can be one-half the maximum allowable height of the wall assembly sought for recognition in an ICC-ES evaluation report.

4.1.2 A set of wall assembly test specimens shall define each combination of variables that affects the performance of the wall assembly, such as stud depth, uncoated minimum steel thickness, and minimum and maximum stud spacing, where the maximum spacing shall be 24 inches (610 mm) on center; type and thickness of gypsum panel products, panel orientation, and location of panel joints; and type and size of fasteners and fastener schedule. If it can be shown that the test data for walls with minimum spaced studs is within 15 percent of the test data for walls with maximum spaced studs, then only walls with maximum spaced studs need to be tested.

4.1.3 A set of wall assembly test specimens, consisting of not fewer than three identical specimens, shall be tested provided deviation of any individual test result from the average value does not exceed ±15 percent. If such a deviation from the average value exceeds ±15 percent, more tests of the same kind shall be conducted until the deviation of any individual test result from the average value obtained from all the tests does not exceed ±15 percent, or until at least three additional tests have been conducted.

4.1.4 Transverse load testing shall comply with ASTM E 72, using uniform air pressure loading on minimum 4-foot-wide (1220 mm) wall assembly test specimens placed in a vertical position as described in Section 12 of ASTM E 72, and Sections 4.1.4.1 through 4.1.4.7 of this criteria.

4.1.4.1 An initial load, or preload, is permitted to be applied to seat the assembly. This preload shall not exceed 10 percent of the average load associated with the L/120 deflection target value.

4.1.4.2 To reduce rotational restraint, cylindrical roller supports shall be used at both ends of the assembly, as shown in the vertical test setup in Figure 3 of ASTM E 72 and as described in Section 12.3 of ASTM E 72. The top and bottom tracks of the wall test specimen shall not be attached or fastened to supports.

4.1.4.3 The gypsum panel products shall be cantilevered at the edges of the wall assembly a distance representative of the tributary load area for the steel studs. To prevent premature failure of the cantilevered edges of the gypsum panel products in the test assemblies, maximum 4-inch-long (102 mm) steel tracks or wood blocks, having the same depth and width as the wall assembly's steel studs, shall be placed at the unsupported edges of the gypsum panel products. These supports shall be located 12 inches (305 mm) from the ends of the wall assembly and spaced 24 inches (610 mm) on center, and may be attached with a screw on one side of the assembly, provided the method of attachment does not increase the wall assembly's stiffness.

4.1.4.4 The chamber method of loading shall be used with an airtight frame surrounding the specimen. A polyethylene sheet or equivalent shall cover the specimen, overlap the frame, and be sealed to the wall of the test facility so that it is reasonably airtight. The polyethylene sheet or equivalent shall be applied loosely, such that it does not contribute to the stiffness of the assembly. A vacuum pump shall be used to reduce air pressure within the chamber behind the assembly. The difference between the chamber pressure and the ambient pressure shall be recorded.

4.1.4.5 Mid-height lateral deflections shall be measured using dial gages or electronic instruments that are aligned with at least two steel studs in the wall assembly and are mounted on a reference frame. The arithmetical average of the deflection readings shall be used to determine the mid-height deflection of the test assembly at each loading increment. As an alternate, a single deflection gage is permitted at the center of the test assembly, provided it is aligned midway between the steel studs.

4.1.4.6 Successive incremental loadings shall be applied for five minutes at each designated deflection target of L/360, L/240 and L/120. Deflections shall be measured at the initial application of each load increment, after five minutes of set, after release of the load increment, and after five minutes of set. Additional deflection targets or alternative deflection targets may be considered based on the specific assembly response characteristics, provided at least three target levels are investigated, and ICC-ES is consulted prior to testing.

4.1.4.7 Test assemblies shall be loaded to failure following the incremental loadings, where failure is defined as when the maximum pressure cannot be sustained without the sudden or continuous movement of the test assembly. After the conclusion of each test, the assembly shall be visually inspected for buckling or permanent deformation of the steel studs, fastener pullout or pullthrough, and gypsum panel failure. The mode of failure and the measured load at failure shall be reported for each test assembly.

4.2 Wall End Reaction Load Testing:

4.2.1 As a minimum, a series of three identical tests shall be performed for each combination of variables that

affect the performance of the assembly, provided deviation of any individual test result from the average value does not exceed ±15 percent. If such a deviation from the average value exceeds ±15 percent, more tests of the same kind shall be conducted until the deviation of any individual test result from the average value obtained from all the tests does not exceed ±15 percent, or until at least three additional tests have been conducted. Variables affecting performance include stud depth, spacing, and uncoated minimum base metal thickness; track configuration and uncoated minimum base metal thickness; type and thickness of gypsum panel products; fastener type, size, and schedule used to construct the assemblies; and fasteners used to attach the track to the supporting construction. If various wall configurations are sought for evaluation, the worst case configuration may be tested. If higher ratings are sought for stronger configurations, the additional configurations shall be tested.

4.2.2 Transverse load testing shall comply with ASTM E 72, using uniform air pressure loading on nominally 4-foot-tall-by-4-foot-wide (1220 mm by 1220 mm) wall assemblies placed in a horizontal or vertical position, as described in Section 11 or Section 12 of ASTM E 72, respectively; and Sections 4.2.2.1 through 4.2.2.5 of this criteria.

4.2.2.1 An initial load, or preload, is permitted to be applied to seat the assembly. This preload shall not exceed 10 percent of the peak load.

4.2.2.2 Cold-formed steel studs shall be spaced as intended for actual construction, except the maximum spacing shall be 24 inches (1220 mm) on center. Track sections shall be placed at the ends of the studs, and the wall assembly shall be sheathed with gypsum panel products in the same manner that simulates actual top and bottom wall construction. The minimum end distance of web holes of studs shall be considered in the test specimen wall construction.

4.2.2.3 One end of the wall assembly may bear against a cylindrical roller, and the other end shall be attached to a wood or steel cleat in such a manner that is representative of actual construction. The cleat shall be set against a rigid support of the test fixture.

4.2.2.4 The gypsum panel products shall be cantilevered at the edges of the wall assembly a distance representative of the tributary load area for the steel studs. To prevent premature failure of the cantilevered edges of the gypsum panel products in the test assemblies, maximum 4-inch-long (102 mm) steel tracks or wood blocks, having the same depth and width as the wall assembly's steel studs, shall be placed at the unsupported edges of the gypsum panel products. These supports shall be located 12 inches (305 mm) from the ends of the wall assembly.

4.2.2.5 Test assemblies shall be loaded to failure, where failure is defined as when the maximum pressure cannot be sustained without the sudden or continuous movement of the test assembly. Each test assembly shall be visually inspected for buckling or permanent deformation of the steel studs or track, fastener pullout or pullthrough, or gypsum panel failure. The mode of failure and the measured load at failure shall be reported for each test assembly.

5.0 QUALITY CONTROL

5.1 Quality documentation complying with the ICC-ES Acceptance Criteria for Quality Documentation (AC10) shall be submitted.

5.2 Third-party follow-up inspections are not required under this acceptance criteria.

6.0 EVALUATION REPORT RECOGNITION

6.1 The evaluation report for interior nonload-bearing walls that comply with this acceptance criteria shall include:

6.1.1 Material specifications for all wall assembly components, description of the wall assembly, and applicable fastener type and fastener schedule for interconnection of framing members and attachment of gypsum panel to cold-formed steel framing members.

6.1.2 Product name and manufacturer's name of proprietary components.

6.1.3 Tabulated limiting wall heights for wall assemblies resisting transverse design loads limited to 5, $7^1/_2$, 10, and 15 psf (240, 360, 480, and 720 Pa) at deflection limits of L/360, L/240, and either L/180 or L/120 (see Section 3.2.2 revision). Tabulated limiting wall heights governed by wall assembly strength shall be so identified.

6.1.4 A condition of use shall state the following: "The interior nonload-bearing wall assemblies shall be limited to interior installations where the superimposed axial load is zero pounds."■